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GRADUATE SCHOOL

Thesis

THE ORCHESTRA AS AN EDUCATIVE
AND REDEPTIVE FORCE IN RELIGIOUS EDUCATION

Submitted by

Gerald Lee Hamilton

(A.B., Washburn, 1923)

In partial fulfilment of requirements for
the degree of Master of Arts

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OUTLINE



I, Brief History of Instrumental Music in the Church.

- A, Primitive and ancient instrumental music and musical instruments.
- B, Instrumental Music in Bible times.
- C, The beginning of a distinctive instrumental style of writing (Seventeenth Century).
- D, Instrumental Music in the Church during the Eighteenth and nineteenth centuries.
- E, Modern adaptation to the church of today.

II, The Orchestra as an Educative force.

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 - 2, Heightens the appreciation for better music.
 - 3, Causes aesthetic enjoyment.
- B, The effect of good music on the performer.
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 - 2, Trains to precision and accuracy through finesse in playing.
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CHAPTER I

BRIEF HISTORY OF INSTRUMENTAL MUSIC IN THE CHURCH

The ideal mission of music is to reflect the loftiest sentiments of the soul of the composer, and to awaken similar experiences in the mind of the auditor so as to inspire and uplift him. To hear the highest music is to be made immediately conscious of one's nobler self. The interest that music arouses is the interest that attaches itself to every human ear; and the love of which it speaks is the love which proclaims the kinship of humanity. Music should reveal the highest ideals of the living soul, and above all other arts seek to interpret them.

Broadly speaking, there are two schools of music. First: Pure or classic music. Bach, Haydn, Mozart, and Beethoven believed that music should be great, perfect and sublime. It revealed an abstract beauty, impersonal in nature. The classicist wrote "music for music's sake". Music was not written about any person or event, and no program was attached to it, as was the case with later music. Composers of the classic school were concerned primarily with beauty of form. A certain restraint and often repose in their music brings serenity to the listener. Such was the music of the Classic school.

Second, Composers of the Romantic school (Schubert, Weber, Mendelssohn, Schumann, Liszt and others), speak to us in another language. Music to them ceases to be abstract.

The first part of the report deals with the general situation of the country and the progress of the work during the year. It is followed by a detailed account of the various projects and the results achieved. The report concludes with a summary of the work done and a list of the names of the persons who have been engaged in the work.

The second part of the report deals with the financial statement of the year. It gives a detailed account of the income and expenditure of the year and shows the balance of the accounts at the end of the year. It also gives a list of the names of the persons who have been engaged in the work.

The third part of the report deals with the progress of the work during the year. It gives a detailed account of the various projects and the results achieved. It also gives a list of the names of the persons who have been engaged in the work.

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It became purposeful and revealed great expressive qualities. Music became personal and intimate in nature. Romantic music speaks to us thru our imaginations, whereas music of the Classicist appeals to our intellect. The Romanticist is fond of tonal coloring; a descriptive and picturesque type of music carries the hearer into the land of fancy. A peculiar warmth and individuality pervades the music of this school.

It is a mistaken attitude to set one school off against the other, or to prove that one style is greater than the other; they are simply different. Surely Bach, Haydn, and Mozart were real characters, notwithstanding the restraint which the artificialities of the period put upon their utterance.

"Compositions of lasting worth always manifest such a happy union of qualities, that in a broad sense they may be called both Romantic and Classic i.e., they combine personal emotion and imagination with breadth of meaning and solidity of structure."

(Walter R. Spalding, "Music an art and Language")

It is evident, therefore, that the terms interlock and are not mutually exclusive. Who can say which is the greater of the two? We should appreciate each for what they have to say to us. It is entirely possible that in the music of the church, a combination of the two styles may be used. One type of music should not be used to the exclusion of the other.

The realm of orchestra music, in which we are to deal, embraces both the Classic and Romantic schools. Music can have real interpretation without words. There are various uses of instrumental music in our churches. It is an antidote to the noise that assails our ears throughout the week- the buzz of the telephone, the roar of the subway, and the rumble of the motor car. Weary with earth's sounds we enter the church. The soft prelude of the organ greets us, and the music gently drops a screen, shutting out the outside world. We lose ourselves in the healing quiet. Touched with the magic of emotion and held attentive by harmony, we are ready for God's message to the soul.

The most eloquent, potent, and capable instrument in the world is the modern orchestra. It offers the maximum of resources, variety, tone color, power and nuance. The orchestra as it exists today is about two hundred years old. It is the culmination of a long series of developments. It is the purpose of the first part of this paper to trace the early forms of musical instruments and their use in connection with religious functions; we may then better appreciate and understand the orchestra as we find it today, and its potential relationship to the church.

At the outset, the stand the writer takes should be clearly understood. Music, in relation to the church and to religion is a means to an end and not an end in itself. The orchestra is one instrument of expression

thru which music speaks. As such, it is a motivating force and a vital factor for good, but it is not sufficient in itself. It has its proper place. To point out that place is the purpose of this thesis.

It can hardly be doubted that music was called into existence at a very early date by religious feelings. Even the most primitive rites were accompanied by something of the nature of music, and the religious states of awe, wonder, ecstasy, and devotion, were liable to engender musical utterance. The symbolic dance and the choral chant are among the most primitive, probably the most primitive forms of worship. Music of a very elemental kind was closely allied to the dance rites performed by savages and barbarians, and it was the nervous excitement produced by certain kinds of musical performance that accounted for the fact that ceremonies of demon worship were accompanied by harsh sounding instruments. It is certain that early instrumental music was made of rude and unsystematized sounds.

Authorities disagree as to which is the oldest of all musical instruments. It is interesting to note that there are three modern orders of instruments found among savages; strings, wind and percussion. The pipe, a primitive form of our modern flute, is among the oldest instruments. Cave dwellers made flutes of leg bones of birds and other animals. A species of these pipes or flutes was found in the Egyptian tombs. There were found sketches of these instruments on Egyptian monuments. One illustration in

bas-relief pictures a double pipe, a drum, a primitive species of dulcimer, and seven harps. A rude type of cymbals was also used for the dances, which consisted of two flat plates. It is known that the tabret or timbrel, a small hand drum was in existence at a very early date, on which parchment was stretched rigid, so that only one pitch was sounded.

Chinese music was of early origin; the instruments used were much the same as those described above. There is no reason to suppose that music among the Oriental monarchies ever progressed much beyond its condition among barbarous peoples of the present day. Music was not a free art, but was held in almost complete dependence upon poetry, dancing and religious ceremonies. No distinctive styles have been discovered among the Assyrians, Egyptians or Hebrews. The Greeks derived much of their musical practice from the dwellers along the Nile. The drums and trumpets were borrowed from warlike nations of the north. It is believed that some form of a drum was known to every nation. This was undoubtedly prompted by the elemental craving for rhythm, one of the three main elements in music (the other two being harmony and melody). Chinese instruments were numerous, as they were borrowed from other parts of Asia. There were a great variety of technical names connected with them. The instruments were made of wood, bamboo, metal, stone, and skins.

The Greeks possessed an extensive variety of instruments, from the "little tinkling sistrum", to the profusely ornamented harp of twelve or thirteen strings (this instrument being taller than the performer). The Greek musical system was based on the tetrachord; a series of four tones corresponding to those of the lyre. The Greeks developed the aesthetic and ethical side of music, for with them it ranked second only to poetry in importance. From such an instrument as the harp with its number of strings, it would seem logical that some sort of harmony must have been produced, the player being represented as using both hands for playing. One historian believes that the accompaniment for singing was in unison and the octave. It was also probable that intervals of the fourth and of the fifth were struck simultaneously. We are justified in supposing that combinations of different sounds were produced, because of the employment of various instruments at one time. The chief instrument of the temple worship was the sistrum, which was often played by women.

The Greeks were the first to recognize music as a free and independent art. They developed a rational scale system, and formulated a rude system of musical notation. They brought to the art of music a greater refinement and scientific elaboration than had been known heretofore. Extreme reverence was paid to music by the Greeks, for

they believed it to be of superhuman origin. It was considered a necessary element in the education of youth, for it was believed to exert a definite influence for good, or under certain conditions, for evil. The typical instruments of the Greeks were the lyre and the flute, the harsh and noisy instruments being avoided. The single and double reed idea was understood among the Greeks. They played on two pipes at once; these instruments had finger holes and produced both diatonic and chromatic scales. The successors of the Schalmel are the oboe, English horn and basson. The reasons are obvious for the decided influence Greek music had upon that of other nations, and of the great interest in their music as well as that of the Hebrews. The music of these two nations is of the most importance, and it has exerted the greatest influence of any of the nations of this period.

Hebrew music was the true Musica Sacra for it was more religion than art. "The music of the Hebrews was divine service, not art" (Ambros, Geschichte der Musik). The Hebrews, as might be expected, borrowed their instruments from their neighbors, the Assyrians and Egyptians. It is probable there were about twenty different instruments, the favorite of these being the harp. There is much confusion regarding their names and character. The instruments used in bible times were different from those which we have today, but because of translations, the same names were given to them.

The music of the Hebrews has born the impress of

the peoples with whom they settled. Laban in speaking of Jacob's departure says, "wherefore didst thou flee away secretly, and steal away from me; and didst thou not tell me, that I might have sent thee away with mirth, and with songs, with tabret and with harp?" (Gen. xxxi. 27).

Due to the fact that Laban was a Syrian, the kinnor is recognized as a Syrian instrument. And again, the intercourse between Abraham and the Canaanites undoubtedly influenced the future of Hebrew music. Four centuries sojourn in so civilized a country as Egypt must have done a great deal to enlarge their knowledge of the art of music. Whatever system of notation the Hebrews had, they learned from the Egyptians.

The Hebrew instruments may also be divided under the three main heads given above, that is:

(1) Strings. (2) Wind. (3) Percussion.

On its most ancient pages the Bible rings with music. When the foundations of the earth were laid "all the morning stars sang together, and all the sons of God shouted for joy".

When Mary laid in a manger her first born son, suddenly there was with the angel a multitude of the heavenly host praising God and saying "Glory to God in the highest, and on earth peace, good-will toward men". In the fourth chapter of Genesis we read of Jubal, "the father of all such as handle the harp and the organ". We hear the silver trumpets of the new moons; the Song of the Bow to lament Saul slain at Mount Gilboa; the whiterobed choir of the Levites, singing on the temple steps: "O give thanks unto the Lord, for he is good, and the

response from other Levites in white: "For his mercy endureth forever". A whole beautiful book rings with the Psalms. Our Lord and His disciples, after their last meal together, sang a hymn before they went to the trial in Gethsemane. Pentacost was shaken with the hymns of believers. Paul and Silas, their backs bleeding from the cruelty of their persecutors, turned their cell into a choir loft, as God gave them songs in the night. The close student of the Epistles finds more than one fragment of early hymns embodied in those letters.

The first instrument mentioned in the Bible is the kinnor, translated "harp" in our version, although John Stainer in his book "Music of the Bible" states that the kinnor was a lyre and that the nebel corresponds more closely to our idea of the harp. The kinnor is the only musical instrument mentioned in the Hexateuch. It also appears frequently in later books, and it is applied to the instrument used by David. It is mentioned thirty seven times in the bible. The kinnor was used to accompany songs of a joyous nature. Unlike the modern harp, it was portable. Moreover, it was the only instrument employed in the temple service. During Solomon's time it was made from the algum tree. The strings were originally of twisted grass or fibres of plants, and afterward were made of gut, silk, or metal. It was originally an Asiatic instrument. A rude model was

found in Southern Babylon, and one was shown on an Egyptian tomb the thirteenth century B C. It was a ten stringed instrument struck with a plectrum. However, David played a kinnor with his hand.

The Nebel was a species of harp which could be played while walking. It is not mentioned in the Bible until 1 Samuel x. 5. It is probably of Phoenician origin, inasmuch as intercourse between Phoenicia and Assyria was quite close at that time. The nebel was first made of fir-wood and afterwards of almug (a red sandal-wood of India). The nebel received frequent recognition in the Old Testament for at one time David set aside special players for this instrument. The nebel-azor was a ten stringed nebel. Other instruments used were the sabeca, a triangular harp; the psanterin, a psaltery of dulcimer; and the kithros, a more fully developed lyre.

The khalil (EV pipe) was most common in use among the wind instruments. It was played coming and going from the High Place. It may have been a simple flute- a mere tube with holes, played by blowing into a hole in the side or end. On the other hand, it may have been a reed instrument like the modern oboe with a double vibrating "tongue" or reed, or like the clarinet with a single reed. There was a universal usage of musical instruments of this class which renders it difficult to classify them accurately. The word "pipe" of the Greeks, and the "tibia" of the

Romans included two important divisions of wind instruments: namely, reed instruments such as our oboe and clarinet, or a simple pipe instrument like our modern flute. References to these instruments are plentiful in the bible. "The people piped with pipes, and rejoiced with great joy, so that the earth rent with the sound of them." (1 Kings 1. 40) . The use of the double pipe by nations with whom the Jews associated is well known but it is a matter of conjecture whether the Jews took up the use of these instruments. The keyed flute is of much later origin.

The Ugab, an instrument which corresponds to our modern organ, was known in Old Testament days, but later became obsolete. Having spoken of the pipe, and of the possibility that the Hebrews knew of the double pipe, it is natural to expect that an instrument would be constructed which placed a number of pipes under the control of the performer. The Ugab was possibly like Pan's pipes. Sir John Stainer states that our modern organ perhaps had its beginning in this rude instrument, which in early times was a collection of pipes, simple in character. Later more importance was attached to it, as improvements were made from time to time. The evolution of the organ from infancy to its present state of excellence, is a study of great interest but space will not permit an account of it here. ("Excursions in Musical History" by Dickinson gives an interesting account of its development.)

Keren, Shophar, and Khatsotsrah are the names of

the three important Hebrew trumpets. These instruments were used in the capture of Jericho. Other trumpets were used on solemn occasions, and there was a "jubilee-trumpet". The silver trumpet was used in the call of worship, as today the chimes are used:

"Today on weary nations, the heavenly manna falls;
To holy convocations the silver trumpet calls,
Where gospel light is glowing, with pure and radiant beams,
And living water flowing with soul refreshing streams".

The cornet was often a curved horn of a cow or ram, hence the translation "ram's horn". It was most often used for secular purposes, to give signals in war. It is still employed by the Jews on solemn festivals. Still another special was a straight metal trumpet, used for religious purposes. When Ehud's personal daring had rid Israel of a tyrant, he blew a shophar and gathered the people together to seize the fords of the Jordan towards Moab. Gideon, Saul, and other warriors made use of the trumpet to rouse and call the people to arms against their enemies. Other nations had trumpets; the Assyrians seem to have used them, and also the Egyptians. The Romans had at least three varieties of trumpet, the most powerful being called the "tuba". It was used as a war trumpet. Chinese oboes and trumpets were made in collapsible sections. This, however, was not to change the pitch but to shorten them when not in use. The idea of changing the pitch of an instrument by shortening and lengthening the tube may

The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the system has solutions for all values of the parameters α and β if the function $f(x)$ is continuous and has a bounded derivative. The second part of the paper is devoted to a detailed study of the properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) are unique and depend continuously on the parameters α and β . The third part of the paper is devoted to a study of the asymptotic properties of the solutions of the system (1) for large values of the parameters α and β . It is shown that the solutions of the system (1) approach zero as the parameters α and β approach infinity.

The fourth part of the paper is devoted to a study of the asymptotic properties of the solutions of the system (1) for small values of the parameters α and β . It is shown that the solutions of the system (1) approach a constant value as the parameters α and β approach zero. The fifth part of the paper is devoted to a study of the asymptotic properties of the solutions of the system (1) for arbitrary values of the parameters α and β . It is shown that the solutions of the system (1) approach a constant value as the parameters α and β approach infinity.

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have originated in this way.

The two words Tseltslim and Metzilloth, are found about a dozen times in the Old Testament, and with one exception are translated "cymbals" in our version. The name fully describes the form of the instrument, for the word "cymbal" comes directly from the Greek "a hollowed plate or basin". At times two flat plates were clashed together sideways, and again two cones with handles at the peak were used. The Greeks and Romans used cymbals- hollow hemispheres of metal in the rites of worship, while the Chinese used both cymbals and gongs. In the Holy Scriptures the use of cymbals was confined to religious ceremonies. It was used in bringing back the ark; the dedication of Solomon's temple; the dedication of the wall of Jerusalem. At this time the clashing cymbals were in the hands of the leaders.

The "tabret" or "timbrel" was a small hand drum with parchment which was rigidly fixed, and could not be tightened or loosened, as can the modern drum. The "toph", a similar instrument, was used by Miriam when she led the song and dance on that wondrous day when Israel saw the work which God had done.

A type of castanets was in existence; two thin metal plates with holes, through which were passed rods with loose metal rings. The shalishin, triangles or three stringed instruments were also used.

This completes the main list of instruments used in Bible times. It gives an insight into the type of music used

in that time, and at the same time gives an idea of the rude beginnings of several instruments which have found a permanent place in the modern orchestra.

Undoubtedly psalms were sung with the help of instruments, and possibly symphonies of sound came to intensify the mood of worship. Instrumental music occupied a prominent place at public festival occasions, social gatherings, and private recreations. Music was often performed on a brilliant and massive scale in conspicuous places. The sorrowing exiles, who hung their harps on the willows of Babylon and refused to sing the songs of Zion in a strange land, certainly never forgot the melodies consecrated by such sweet and bitter memories. In the course of centuries they became lost among strange peoples. Does anything remain of the rich musical service which for fifteen hundred years went up daily from the tabernacle and the temple to the throne of God? "Thus consecrated for its future mission, the soul of music passed from Hebrew priests to apostles and Christian fathers, and so on to the saints and hierarchs, who laid the foundation of the sublime structure of the worship music of a later day".

We have little definite information concerning the development of instrumental music during the middle ages. The church composers, in whose hands musical culture lay, did not feel the need of instruments and did not encourage their use. Records show that the Troubadours of Provence during the eleventh to the thirteenth centuries accompanied

the folk songs they sang, on a variety of instruments—the crwth, rebec, lute, harp, and viol. Instrumental interludes were played between pieces. The Minnesingers of Germany, during the thirteenth century, united simple verses with an accompaniment on a single instrument. The Maestersingers, (guilds of artisans in the fifteenth and sixteenth centuries) had a variety of instruments at their disposal, but they were clumsy and limited in efficiency.

For several centuries the whole labor of artistic composers was directed toward the production of unaccompanied church music. The folk songs of the people undoubtedly manifested a significant influence on the religious music of the time. Preceding the seventeenth century, little purely instrumental music was produced. Compositions were occasionally written for the organ, but they looked and sounded like choral music. Music was sometimes written with the instruction "to sing or to play".

The history of choral music is traced from unison singing, through the stages of organum (the voices being a fifth apart), to the use of descant, and finally to an elaborate system of florid polyphonic writing which existed during the middle ages. The culmination of skill in writing for voices is evident in the works of Palestrina and his contemporaries, Josquin des Pres, Arcadeldt, and Lassus. The aim of these men was to break down the rhythmic effect

by tying over weak beats to the strong ones. Thus an impersonal quality pervades the music of these masters. The organ adds its tone to the voices of the sixteenth century at St. Marks cathedral in Venice. Independent solo organ style makes a modest appearance. Many cathedrals in Italy had two galleries with two choirs and two organs facing each other. In consequence, much of the music of this school was antiphonal in character.

The Renaissance transferred other arts to new bases, and it became necessary for music to follow the same course. The great musical awakening during the latter part of the sixteenth century inevitably stimulated the cultivation of instrumental music, and at this point the history of such music really begins.

Members of the keyboard family, the harpsichord, clavichord, and organ are in use. Late in the sixteenth century came the "viol" family. However, the instrument most in use was the lute; it was popular in fashionable society during the fifteenth, sixteenth, and seventeenth centuries. The unaffected churchly music of the Palestrina school is replaced by a florid, meaningless type of music, written to be performed at a great rate of speed.

The invention of opera, during the last of the sixteenth century exerted a powerful influence on instrumental music. Jacopo Peri, in his opera "Eurydice", written in

1600, employed an orchestra consisting of a harpsichord, lute, large type of flute, lyre, and three smaller flutes. The instruments supplied a simple chord accompaniment for a primitive species of dramatic recitative. Secular music developed with the practice of solo melody with instrumental accompaniment.

In the seventeenth century, instrumental music made rapid strides. The organ became more flexible. It is regarded as the connecting link between choral and instrumental music. Organ music was the first to develop a distinctive instrumental style. Such instruments as the oboe, flute, trombone, and piccolo were in a crude state. The French Horn came into use the first half of the seventeenth century, although it was capable of playing only a few notes of limited range. Instrumental music began to have an effect on choral music. More dissonance became employed in church music, because of the influence of instrumental music. Spain, because of her love of color, did much toward the development of the orchestra.

A long series of experiments to better orchestral instruments took place about this time. The history of instrumental music during the seventeenth century was largely concerned with the development of violin technique and the perfection of that instrument. The violin predominated in the formative period of modern music

The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom. It is shown that the structure of the atom is determined by the laws of quantum mechanics, which are based on the principle of the uncertainty of the position and momentum of the particles. The second part of the paper is devoted to a discussion of the structure of the nucleus. It is shown that the structure of the nucleus is determined by the laws of quantum mechanics, which are based on the principle of the uncertainty of the position and momentum of the particles.

The third part of the paper is devoted to a discussion of the structure of the molecule. It is shown that the structure of the molecule is determined by the laws of quantum mechanics, which are based on the principle of the uncertainty of the position and momentum of the particles. The fourth part of the paper is devoted to a discussion of the structure of the crystal. It is shown that the structure of the crystal is determined by the laws of quantum mechanics, which are based on the principle of the uncertainty of the position and momentum of the particles. The fifth part of the paper is devoted to a discussion of the structure of the liquid. It is shown that the structure of the liquid is determined by the laws of quantum mechanics, which are based on the principle of the uncertainty of the position and momentum of the particles. The sixth part of the paper is devoted to a discussion of the structure of the gas. It is shown that the structure of the gas is determined by the laws of quantum mechanics, which are based on the principle of the uncertainty of the position and momentum of the particles.

The seventh part of the paper is devoted to a discussion of the structure of the plasma. It is shown that the structure of the plasma is determined by the laws of quantum mechanics, which are based on the principle of the uncertainty of the position and momentum of the particles. The eighth part of the paper is devoted to a discussion of the structure of the solid. It is shown that the structure of the solid is determined by the laws of quantum mechanics, which are based on the principle of the uncertainty of the position and momentum of the particles. The ninth part of the paper is devoted to a discussion of the structure of the liquid crystal. It is shown that the structure of the liquid crystal is determined by the laws of quantum mechanics, which are based on the principle of the uncertainty of the position and momentum of the particles. The tenth part of the paper is devoted to a discussion of the structure of the superconductor. It is shown that the structure of the superconductor is determined by the laws of quantum mechanics, which are based on the principle of the uncertainty of the position and momentum of the particles.

because it afforded opportunities for brilliancy and at the same time melodic expressiveness. Early in this century the violin reached completion, due to the remarkable achievements of the school of Italian violin makers—among them Amatis and Stradivari. To these men we owe the refinement of detail. One of the important changes established was the use of different sized instruments, which corresponded to the human voice in its different ranges.

Composers had little idea of what to aim at in writing for the orchestra. The poor technique of performance on string instruments accounts for the crudity and absence of expression in music, for man developed skill in playing slowly. There was little system of combining the various instruments in playing. A group of violins played in unison, in rivalry with other groups of instruments. Gradually there began to be a division of strings, which resulted in more variety, richer tone coloring, and sonority. Toward the end of the seventeenth century the full quartet of strings came into use. The violin compass was extended and the various instruments were more systematically grouped.

The production of Monteverde's opera, "Orfeo" in 1618 showed a distinct advance in the orchestration. Two harpsichords, two bass viols, ten tenor violins, one

double harp, two little French violins (which resemble our violin of today), two organs of wood, two viole di gamba, four trombones, one regal, two cornets, one little octave flute, one clarion, and three trumpets with mutes, were used.

Monteverde introduced several novel effects and improvements in the orchestra. One of these was the tremolo for bowed instruments. Rhythmic figures, syncopations, alternating scales, and the pizzicato were employed. This shows that he had begun to appreciate the expressiveness of the instruments. Furthermore, he indicated the fundamental value of the string instruments played with bows. Real significance lies in the fact that he opened up a realm of special instrumental effects, distinguished from vocal ones. It is the suggestion of one authority that the idea of using a bow with string instruments, originated from ancient times, when the bow was used with the arrow as a weapon of defense.

The establishment of the string quartet was the first vital step toward the arrangement of the orchestra as we find it today. This came as a direct result from the experiments of Monteverde. Another Italian genius, Scarlatti, is reputed as the highest developed writer in the seventeenth century. He gave the treble part to the first violins, the alto to the second violins, the tenor

to the viola, and the bass part to the bass instruments. That is what composers have done ever since. In this way he established the supremacy of the strings, and at the same time secured better balance in the entire orchestra. He further enriched the tone of the orchestra by using the wind in pairs. These instruments were used to increase the volume of tone and to produce certain obvious color effects. Tympani came into the orchestra about this time. Trumpets were heard in martial scenes, the oboe in pastoral passages, thus creating special effects with certain instruments. The single reed clarinet came into existence the last of the seventeenth century, but it was not until the close of Mozart's career that it was used in connection with the orchestra.

We have now reached the beginning of the eighteenth century. Two composers came into prominence and exerted an influence on the entire subsequent development of music. First and foremost of these men was John Sebastian Bach (1685-1750). From Bach flows a never ceasing stream of musical life, the fountain head from which spring the leading tendencies of modern music. In these days when stress is laid on the romantic element in music, on warm emotional appeal, it is well to consider the quality so prevalent in Bach of spiritual vitality. Bach carries us into the realm of universal ideas, inexhaustible and changeless in their power to exalt. Schumann says that "Music owes to Bach

what a religion owes to its founder". It is true that a knowledge of Bach is the beginning of musical wisdom. The music of Bach abounds in a vitality of rhythm. His music is essentially polyphonic in character; he treated the orchestral instruments as if they were so many voices. Each voice had a melodic part to sing, and the beautiful interweaving of these parts constitutes one of the great charms of Bach's music. He contrasted with this polyphonic writing, passages of extreme simplicity, in which the strings, organ or clavier were used.

Bach was intent on securing life and interest for each of the voices. As shown above, due to the perfection of the family of string instruments, the principles of polyphony were carried over and applied to instrumental treatment. Instead of the single melody in the soprano or upper voice, of the folk-song, we must now listen consciously to the bass and to both the inner voices.

Bach composed two sets of inventions: fifteen for two voices, and fifteen for three. These works alone place Bach as a consummate master of polyphony, and when we study the "Well tempered clavichord", we cannot but marvel at the texture which braids the entire works together. Polyphonic skill reaches its highest possibilities in the fugue, and the immortal examples of this form are the fugues of Bach, found in his well tempered clavichord. In these works he

employs the more subtle devices of fugal treatment: inversion, augmentation and diminution, shifted rhythm and stretto.

"The music of Bach has that greatest of qualities in art as in human relationships- it wears well and lasts.

We all know that books which reveal everything at a first reading are soon thrown aside, and that people whose depth of character and sweetness of disposition we discern but slowly, often become our life long friends. Music which is too easily heard is identical with that which is immediately forgotten. The first impulse created by any great work of art is our longing to know it better. Its next attribute is its power to arouse and hold our steady affection. These observations may be applied literally to Bach's music, which can be heard a lifetime, never losing its appeal but continually unfolding new beauties."

In Bach, we feel the force of a great character even more than the artistic skill with which the personality is revealed. In this respect Bach in music is on a par with Shakespeare in literature and Michael Angelo in plastic art. In Bach we always remember the noble human traits, for they are due chiefly to the manly sincerity and emotional depth found therein.

Bach was one of the first composers to successfully combine choral and instrumental music. Noteworthy examples of this method of writing are: B Minor Mass and the Saint Matthew Passion, both by Bach. In these works he achieved

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freedom of writing for both the chorus and the orchestra. After instruments obtained the privilege of artistic utterance, they were for a long time slavish imitators of the human voice. Bach, however, treated them far in advance of his time, in that they became a separate media of expression, apart from the voices.

George Frederick Handel (1685- 1759), unlike Bach, enjoyed world-wide fame during his life; his works were studied by musicians far and near. Various choruses from his oratorio "The Messiah", illustrate how he built up huge climaxes by mass effect. It has been truly said that we follow Bach for solo effects, while we follow Handel for solidity and sonority. Handel used his orchestra chiefly as a support for the voices. He often used as many wind instruments as strings, for it is not until Haydn and Mozart that we find the balance as it exists today.

The evolution of the orchestra divides itself broadly into two periods, the first ending soon after the middle of the eighteenth century with the death of Bach and Handel, the two great masters of harmonic polyphony; the second period beginning with the rise of modern orchestration in the hands of Haydn and Mozart.

Josef Haydn (1732-1809) is credited with being the "father of the symphony". It was he who established the proper balance necessary for good orchestral writing. He showed rare insight into orchestral effect, as may be judged from the fact that in his "messe des Morts" he used

two groups of instruments- one of wind instruments concealed outside the church, and the other of strings inside; the latter accompanied the wind with a tremolo in the high register. In the "Creation" he made the orchestra paint chaos, and in the "Seasons" he pictured thunder storms and spring peace thru the music. Haydn was the first composer to give systematic prominence to the string band, making

the wind supplementary, a practice which has been followed ever since. Both Mozart and Beethoven acknowledged their debt of gratitude to Haydn, for it was he who opened the way. His music shows master^{ful} of style, spontaneity and wealth of sparkling melodies, and above a unity and coherence in his writing. He established the grouping of the three so-called choirs of strings, wood-wind, and brass; to which were gradually added the instruments of percussion.

In the oratorios of Haydn, the chorus was used merely to give vocal comment, for the majority of the interest is found in the orchestral parts and the solo voice parts.

(Mozart and Beethoven are inclined to follow the same practice, as their writing is often ungracious for voices-) note the "Ninth Symphony", where Beethoven uses the chorus in the last movement to heighten the dramatic effect. The voices are continually placed high, and at times they are used as so many instruments. Contrast this with the careful

voice placing of Handel, each being in the register where it will sound to the best advantage.

To Mozart we owe the perfection of the sonata form. He is venturesome in his use of dissonances. His highly wrought instrumental melodies often show great emotional depth. He is the first composer to establish the clarinet as an integral instrument in the orchestra, and to prove to the conviction of all subsequent composers its true place there. His work was rather that of exploring the capacities of the various instruments, rather than adding new ones to the extant list.

The development of the orchestra in the hands of the greatest of all symphonic composers, Ludwig van Beethoven (1770-1827), was of real importance. He did not add greatly to the array of instruments, although he did use the piccolo, trombone, and contra-basson, and was the first to employ four horns in his score. The trombone, although it had long been used in church services, did not enter the instrumentation of the regular orchestra until the nineteenth century. During this century chromatic valves were employed on horns and trumpets.

The task of Beethoven was to enlarge and demonstrate the true relationships of the various groups of instruments, according to his desire for greater utterance. He brought the classic orchestra to the highest point of perfection. Beethoven searched out the capabilities of each instrument.

For example: He discerned the real value of the cellos, basson and tympani (note the Fifth symphony, in the third movement, where for fifty measures, the only activity in the orchestra is the incessant rhythmic figure on the tympani, which pervades the entire symphony).

Daniel Gregory Mason in his book "Beethoven and his forerunners" says: "Beethoven was remarkable for two qualities. First- Eloquence of expression; second- beauty of form. These two qualities are intervoven- the result is a genius." The works of Beethoven show virile energy and power. Yet at the same time we find a tenderness of sentiment and emotion present in the same work. He was fond of piquing the curiosity of the hearer by long stretches of pianissimo playing in which nothing happens, but in which every minute we expect something to come. His music is a mixture of the gay, humorous, and whimsical side of life contrasted with a deeply emotional type of music.

We owe to the "Romanticists" many beautiful and coloristic effects. Weber, Schubert, and Mendelssohn created new orchestral effects by dividing the violins, while their successors, Liszt and Wagner wrote for three first and three second violins, two violas, and two cellos. Divided strings in contrary motion were used with remarkable effects by these composers.

In the oratorios of Mendelssohn, the interest in the music returned to the chorus. Later in the works of Brahms two separate and equally interesting strands are

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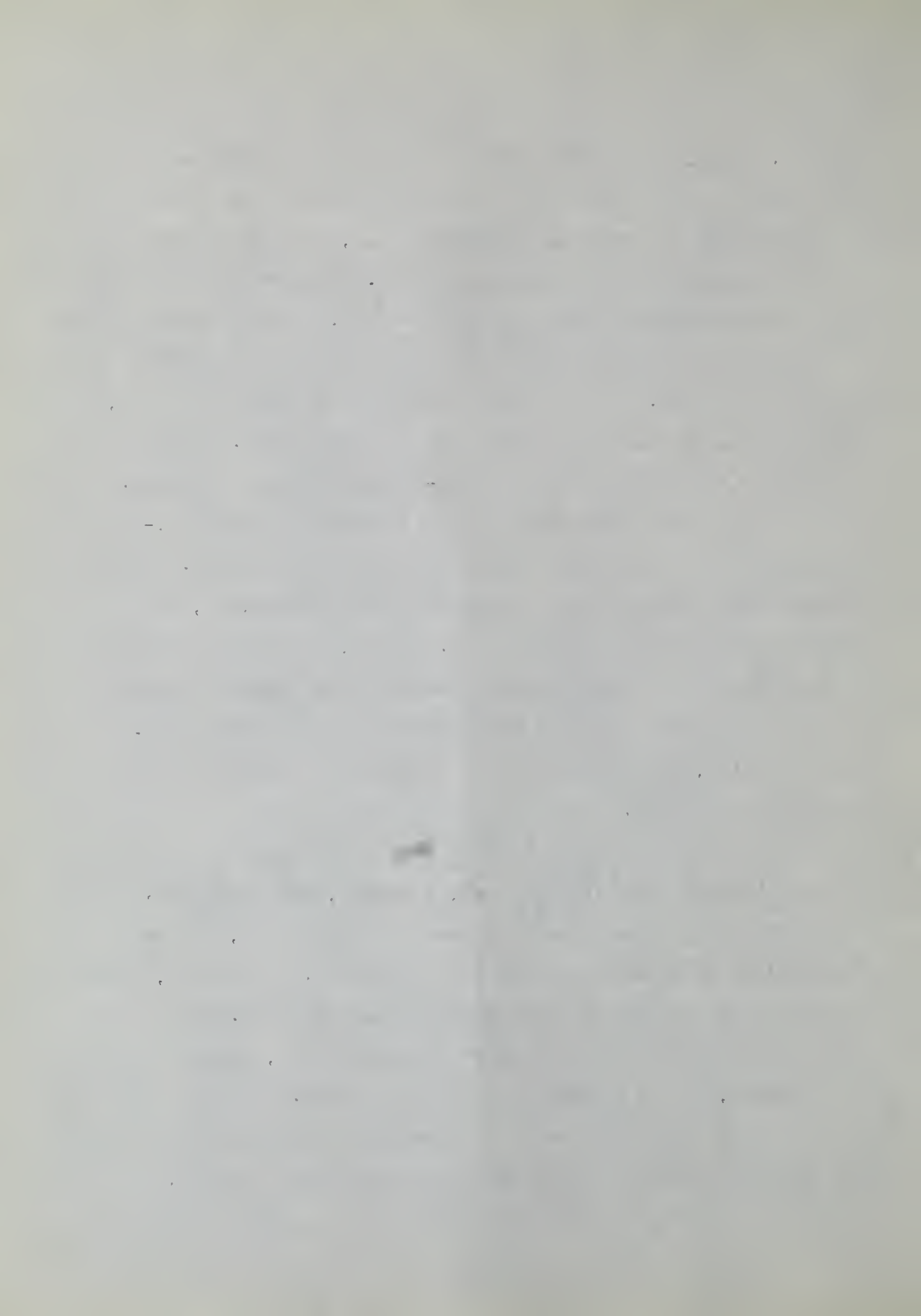
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woven. The greatest tribute which can be paid to Brahms is that he has summed up and united the classic principles of clearness and solidity of workmanship, with the warmth and spontaneity of the Romantic school. A seriousness of purpose runs thru all the works of Brahms. He had something to say, and he said it in the most simple and direct manner possible. He was a great master of pure melodic line, and his texture is of marked richness and variety. He has been called the Browning of music- a deep thinker in tones.

One of the masters in tone coloring was Berlioz,- the father of the modern orchestra he has been called. His work was as idiomatic in treatment for the orchestra, as was that of Chopin for the piano. Wagner, in his music dramas explored a new field. His orchestration was firm and supple; with a substratum of soft brass harmonies as a background. In addition, the development of writing for unsupported wind was due to Wagner.

Richard Strauss added to existing orchestral effects by muting the ensemble of horns, trumpets, and trombones. His use of the tenor and bass tubas is remarkable, for he has produced effects never before conceived. To Strauss, we owe much in the development of the symphonic poem. He has constructed vast tonal edifices in these works, symphonic in length, yet with complete freedom of form.

We have seen the orchestra grow from a collection of various instruments, available at any particular place,



roughly thrown together around a feeble core of keyboard instruments and lutes, through various stages of growth. Some instruments were rejected and others adopted. During the middle of the nineteenth century the orchestra became stabilized ; since that time few important changes have made. From a feeble beginning, we have traced its growth to the complex and conscious art of the present day.

When we hear music performed at our symphony concerts, with its glowing orchestral colors, richness of orchestration, unique and often fantastic use of the various instruments, we cannot but marvel at the genius of the men who in a brief three hundred years have made it possible. Music is one of the oldest and yet youngest of all the arts, for the sister arts, painting, sculpture, literature were old when music was but an infant. Yet we hear music today in a highly organized state, capable of powerful emotional effects. It may be used as a potent factor in the education of our young people, toward a better understanding of life, by contact with the great music and musicians of all times. Music should have a definite place in the church service, more than the role which is often allotted to it or "filling in the gaps". The orchestra as one instrument of expression should have a definite place in the life of the church.

The orchestra, and its smaller sister, the trio, or string quartet, and other ensemble combinations, at present

exert little influence in the musical program of the church. The wealthy churches in the large cities often hire professional musicians to play in their churches on special occasions, to play at them. Occasionally a small orchestra is hired (again professional musicians)- they are engaged to furnish the accompaniment for an oratorio, playing under a director they have never seen before, with a single hurried rehearsal before the concert.

Another picture— a small town church, with country folk as a nucleus. They have caught the vision!! The teacher of public school music or the pastor of the church have banded together those who play an instrument. The result is an orchestra. They meet at the church Sunday afternoons, practicing the old familiar hymns, which are to be used at the evening service. The orchestra prepares special selections; possibly it is to be a cornet solo by the high school lad, or it may be the timid young lady in her teens who plays the violin or cello. Granted, the music when played may not, and probably will not have the perfection of the professional musicians in our other picture. Yet the service being rendered, and the spirit of the entire undertaking in our last picture— is it not infinitely more worth while?

The answer is the remainder of the thesis.

CHAPTER II

THE ORCHESTRA AS AN EDUCATIVE FORCE



The ideal mission of music ever has been, and should be that of uplifting those with whom it comes in contact. It should reveal the highest ideal of the living soul. "Art aims at expressing an ideal, and this ideal is the transfiguration of human elements into something nobler, felt and apprehended by the imagination. Such an ideal- such an all embracing glorification of humanity, exists only in the forms of religion. " Palestrina once said that music exerts a great influence on the minds of mankind and it is intended not only to cheer these but to guide and control them. This man dedicated his last music to "the glory of the most high God and the worship of his holy temple."

Music, above all other arts, interprets the innermost thoughts of the soul. It tells the deepest truths of life. It is older and deeper than wisdom. The greatest power of music is not based on the outward and the visible, but on that invisible realm of thought and feeling, and aspiration, which is our real world. It builds for us an immaterial world- not made of objects, or theories, or dogmas, or philosophies, but of pure spirit- a means of escape from "the thralldom of every day".

Music is dual in nature; it is spiritual as well as material. Its material side we apprehend through the sense of hearing, and comprehend by means of the intellect. Its spiritual side comes to us through the realm of fancy

or imagination, and stimulates the emotional side of our being. The elemental appeal of music is well known. It can degenerate and consequently produce a bad effect. This is what happens with the so-called "Jazz music" of our day. Its appeal is not that of uplift but of sensuous effect, and it is liable to pull us down to its level.

On the other hand good music has the power to lift the hearer to high levels, and it calls forth the best that is in us. The importance of the type of music to be used in our churches as well as concert halls, must not be underestimated. Cheap music destroys that element which we are trying to build up in the service of the church. On the other hand, music of the right kind cultivates the spirit of worship. A noble ideal of worship should permeate the entire service. The orchestra can aid in this, both in the rendition of special music and in playing the hymns. Music gives frame and setting to the service of worship, and this service, if properly conducted and earnestly participated in, is the greatest aid the preacher can have in presenting spiritual truth. "Music is the bridge from the sense to the soul".

Religion is something a person should feel; it should be a definite experience which enriches his own life. If the spirit of music is all it can be, and ought to be, it will prepare the way for the preacher. When he steps into the pulpit, as one prominent minister-musician has said "the work---is half done before I announce my subject

or text, and I have only to cast myself into the emotional stream already running strong, and carry my audience off to the specific goal which I am to attain".

Many preachers have realized the power of music in cultivating a spirit of worship. Martin Luther and John Wesley assigned to music a prominent part in the service. They felt it gave a proper setting, and created the right attitude and atmosphere for their message. The orchestra has the definite power to assist in creating the spirit of worship. If the young people in the orchestra feel the music they are playing, they will enter heartily into the service. A reverent attitude will permeate both the congregation and the players. Such results are not mere theoretical possibilities; they have been accomplished in actual practice.

Second, the auditor will have a heightened appreciation for good music. All normal beings have a natural love for music. They may be cultivated by contact with a better class of music which has an instinctive appeal. Who can remain unmoved while listening to a symphony of Mozart or of Beethoven? Behind the sensuous factors, rhythm and sound, lies the personal message of the composer and if we are to grasp this and make it our own, we must go hand in hand with him, that the music may actually live for us in our minds and imaginations. In addition to its sensuous appeal, music is a language used as a means of personal expression- a direct means of communication between

the mind and soul of the composer and the listener. Composers of the Romantic school used music to portray some event, or depict the personality of some great man. Such music is educational in character, and the director is missing a real opportunity if he does not associate the music with the events about which it is written. The third symphony of Beethoven ("Eroica") is a notable example. Beethoven had always admired Napoleon.. Beethoven admitted that he had this great man in mind while writing this symphony. Surely it is a noble work of gigantic proportions. While composing this work he had a mental picture before him. After it was finished he dedicated it to Napoleon. We see in this symphony the Europe of that day- a militant country proud of her accomplishments. There was a crisis in European affairs due to Napoleon's acceptance of a crown. The influence of the American republic was felt across the water. People were seeking a new mode of living. Music was destined to the same fate. No longer could composers be content to write music in the light, graceful vein of a former time. The music of Beethoven ceased to be abstract music for its own sake. His compositions are genuine poems, which tell their meaning to the true listener clearly and unmistakably in the language of tones, a language however which cannot be translated to mere words. Beethoven, when he heard the step Napoleon

had taken in accepting the crown, became very angry, and even went so far as to tear Napoleon's name off his manuscript, and put in its place another name. Program notes are usually furnished at concerts, which add to the interest of the music played. In connection with the music of the church, brief notes may be printed in the calender concerning the nature of the music, especially if it is a selection from an oratorio or cantata. Often times a hymn tune or chorale is woven in the music used. Der Freischutz Overture by Weber, Festival Overture by Nicolai, Nocturnal Piece by Schumann, are examples of the use of hymn tunes. Mendelssohn's two oratorios "Elijah" and "Saint Paul" abound with chorales. The same is true of the "Saint Matthew Passion" by J. S. Bach.

At a secular concert, a foreword by the conductor before the selection is played, adds to the interest the music. Such work is of educational value not only to our young people who come into intimate contact with the music, but to the general public who hear it.

The public schools and colleges provide courses of Music Appreciation for students that are interested from the "listeners viewpoint", that is, students who do not expect to become musicians. It is desirable for the church to supplement this work, by encouraging further musical activity of its young people. If properly

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presented, such work will add to the work of the church. Too many times our young people come in contact with the music of Haydn, Mozart and Beethoven during the week, and on Sunday they hear a cheap, sentimental, and saccharine type of music in church. Such music is found not only in our choir music, but also in the hymnals.

There is no dearth of good music available for use in the church. Music by Palestrina, Bach, Caesar Franck, Handel, Mendelssohn and Brahms is always good. The people of the congregation, once they become acquainted with this better class of music, will demand it in preference to the other type of music. Good music, if thoughtfully chosen, reverently and skillfully rendered, by the organ, choir, or orchestra will give expression to that feeling of worship which characterizes man consciously in the presence of God. There is no reason why the church should accept less than the best music.

Good music, well rendered, creates aesthetic enjoyment. The orchestra is the most capable medium to produce music in which the three fundamental elements are present, that is: Harmony, Melody, and Rhythm.

Melody- The orchestra presents a variety of ways to express this element. For example- solo instruments are used with a background of orchestral color by the Romantic composers. The flute, clarinet, oboe, horn, solo violin or cello are used most often. The ear gradually becomes sensitive

to the development of two or three melodies played simultaneously; this interweaving of melodies being found in the music of Brahms, Tschaikowsky, Wagner, and others.

Harmony- the modern orchestra of today has three full choirs, strings, wood-wind, and brass, each capable of complete harmony. In the small orchestra, a well balanced string need no help to complete the full harmony. In addition, the strings form a background for the solo instruments (Schubert's Unfinished Symphony illustrates this type of music).

Rhythm- the orchestra offers much better facilities than the chorus, pianoforte, or organ, to produce this element. The tympani present expressive possibilities and are a necessary part of the orchestra. The other instruments of percussion: the triangle, bass drum, cymbals and snare drum are of value in secular concert music, but it is doubtful whether they should be used in the church **service**. Rhythm is less important in sacred music than melody and harmony. Choral composers of the sixteenth century attempted to destroy rhythm, which as shown above, gives an impersonal and churchly quality to their music.

All great composers, with few exceptions, have used the orchestra as a medium of expression, for they have realized its expressive possibilities. Our enjoyment is stimulated when we understand the music played, that is, the use of motives, construction of sentences, movements etc.

The would be appreciator should early recognize that listening to music requires more than a passive interest. It demands cooperation of an active nature- an intensity of concentration. Who can limit the combinations of sound and rhythm, or forecast the range of human imagination? We enjoy music because it takes us away from the ordinary routine of life.

Keen enjoyment may be realized in listening to music of the classic school, "absolute music", it is often called. Such music has no suggestive titles or program notes. Perfection of form was developed to the highest point by the men of this school, as has been shown in the introduction to this paper.

The folk song element enters into the music of many of the composers. Many of them have drawn directly from this source, while others have used melodies of folk like character to express their thoughts. Such music has an instinctive appeal, for the folk song comes directly from the heart of the people. To illustrate: folk music of the Russian people expresses the dark despair and heart-rending suffering social sufferings of a people, more effectively than it is pictured in words by Tolstoi or Gorky. The same tinge of gloom that we see in the works of Russian novelists and poets, gives to Tschaikowsky's musical utterances a poignant, personal note, for which his Russian heredity and environment are responsible. The domination of priest and noble and the ban upon freedom

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of speech and thought is shown in the music of the Russian school. Tschaikowsky often incorporated native folk melodies in his music. Sibelius, the famous Finnish composer used a melody of folk like character in "Finlandia", while Brahms incorporated several student songs in his "Academic Overture". Compositions of Haydn have folk songs entirely unchanged in them.

A variety of methods are used by composers to arouse our interest. Chopin's art was one of suggestion. He said, "I only sketch; I let my hearers fill it out." On the other hand, Franz List^B furnished everything and expected from the public only cries of excitement, or the silence of awe.

Longfellow has said "Music is the universal language of mankind." The question for every music lover is: how can I best equip myself to feel at home with this language, receiving the message as directly as possible, with perfect ease and satisfaction? Such equipment demands a strong, accurate memory, a keen power of discrimination, and a sympathetic, open mind. When we listen to music, and value it for what the composer intends we should find in it, we will realize a real satisfaction and sense of enjoyment.

Now that we come to the study of the effect of good music on the performer, our perspective changes. He

has a vital and active interest in the music, for he is "making it". Thus the music becomes a part of him. Our study now takes us more directly to the orchestral side of music. The performer must merge himself into the ensemble, that he may become a unified part of the orchestra, which is to be the instrument of expression, to be played on by the conductor, just as he would play on a large organ. This requires a high degree of coordination, which when accomplished, furnishes a capable instrument to express the thoughts of the composer.

The player comes into intimate association with the great musicians of all time, thru their music. This contact may be as real, as if he were reading an autobiography of the composer. In the music of Beethoven, we find a direct expression of his joys and sorrows, triumphs and disappointments. His compositions are human documents of undying power, which quicken and exalt the soul. Beethoven had a strong character, and in music he found the most suitable means of self expression. His music, in its intense personality, stands as a vivid expression of his ideals to his fellow men.

An inestimable good will come to our young people when they are brought into contact with great men, thru their music. Rev. H. R. Haweis points out in his book "Music and Morals" that the majority of great musicians were good morally. Haydn retained a lively sense of

religion. Whenever he found it difficult to compose, he would resort to his rosary in prayer. Mozart was a man of singularly well-balanced character, and his religious life was earnest and practical. Of Beethoven we have already spoken. How deep and tender was that noble heart. There was no stain upon his life. His integrity was spotless; his purity unblemished; his piety simple and sincere. He was not only severely moral and deeply religious, but his ideal of art was the highest, and we know that he was true to his ideal. Mendelssohn was a man of keen, piercing intellect, who had absolute devotion to all that was true and noble, coupled with an instinctive shirking from all that was mean. He had that fierce scorn of a lie, that strong hate of hypocrisy, that gentle unassuming goodness. In a lying generation he was pure. He took up the writing of oratorios because he found so much in opera that was ignoble, and of impure association. Of the lives of such men as Bach, Handel and Caesar Franck we need not speak. They were great musicians in the highest sense of the word, and the noble sentiments they have sought to express in their music will live forever. High ideals will be stimulated in our young people because of association with these men through their music.

Contact with such works as the "Messiah", "Saint Matthew Passion", Brahms' "Requiem", or "Elijah", makes

a lasting impression for good on those who play and sing. Their souls will be enriched, and they will feel as Handel did, in speaking of the Messiah: "I did think I did see all heaven before me and the great God himself".

The thorough conductor requires accuracy and precision from his players, for they are a fundamental requisite in successful playing. The player's mind must be alert and quick to action. This sharpens his perceptive powers, and requires of him eternal diligence while playing.

The training thru which an orchestral player goes in the routine of rehearsals, is of practical value to him. Accuracy required in playing finds place in his school work. To the young musician who expects to make music a life work, the intensive training he undergoes in an orchestra in learning to work together with other members of the orchestra, is an absolute necessity. It makes little difference whether he expects to be a soloist, symphony player, or theatre musician. He should come in contact with the music of the masters. If the conductor is capable, the members of the orchestra will receive many valuable suggestions how the music should be interpreted and played. Special benefits are derived from playing in certain sections of the orchestra. Second violin and horn parts strengthen the rhythm of the player. The pianist who finds no regular place in the orchestra, will do well to join the percussion section, learning to play the tympani, or various other instruments of the battery. The first chair players in the wood-wind and brass sections often have solo passages to play.

The conductor of the amateur orchestra realizes the confidence he must place in his players in performing an oratorio. The solo parts (soprano, alto, tenor and bass) are thinly scored. It is imperative that the various instruments be accurate in entrances- otherwise the accompaniment will not be well balanced. It is valuable training for the young player to have such responsibility placed on him, when he knows that if he fails the effect will be marred. This develops confidence in the player. He comes to realize his ability to perform the work creditably. The writer has seen young men and young women of high school age, playing the first chair violin, cello, flute, clarinet, and trumpet, who have played the Messiah score in performance without missing a single entrance- a feat of no small proportions for any musician.

It is often possible to give the more advanced members of the orchestra opportunity to do solo work, trio, or quartet playing. Such work serves a double purpose in the musical program of the church. First; the player has a definite activity in the work of the church. Second: It affords the player practical experience. Violin, flute, cello, cornet, or trombone solos, may be used at various meetings of the church- Christian Endeavor, Church School, and Missionary Society. At times it is advantageous to use a trio, string quartet, or other small ensemble combinations. A double blessing will come when the church realizes these

opportunities, and uses the young people in the program of the church, instead of hiring outside talent.

The conductor is a comparatively recent addition to the orchestra. Prior to the seventeenth century, the conductor was merely a performer the other players followed. Yet long before the year 1600 there were conductors who used a baton. An ancient manuscript (1318) in a Parisian library contains an illustration, showing a Minnesinger conducting a choir of singers and players. He was seated on a raised platform, and had a long baton in his left hand.

The early operatic performances in Italy were conducted from the harpsichord. This method was used by Purcell and Handel. They were content to conduct with a nod of the head, a wave of the hand, and an occasional stamp of the foot. In ever-theatrical France where the eye must be fed, it became the custom to use a baton. This practice became general when the wind choir of the orchestra increased in power, so that the harpsichordist was unable to make himself heard. At one time the first violinist conducted the orchestra (a custom which still holds over in our motion picture houses of today). It is sufficient to say that the old fashioned time-beater's work was complete when he indicated the correct tempo, (Wagner maintained this was the sole duty of the conductor) and plainly marked the beginning and necessary subdivisions

of each bar. The interpreting conductor made his appearance in the early part of the nineteenth century. At the present time there is a general tendency to exaggerate this element of his work. "Readings" are the order of the day. The personality, style, magnetism, and even the cut of the coat, thrust themselves between the public and the music itself. The conductor of necessity must do the major part of his work at rehearsals, for at the performance he can only give signs to remind the players the way the piece was practiced at rehearsals.

The subject of church orchestra rehearsals is an important one, due to the number of things to be accomplished in a short time. Regularity of attendance at rehearsals is imperative. Without this, accurate and finished playing is unattainable.

Enthusiasm and interest are two essentials in the church orchestra rehearsal. The players come of their own volition, without remuneration, and without any special incentives (such as credits) to bring them. Their reasons for coming are: enjoyment derived from playing, and second, the service rendered to the church. If tangible results are to be accomplished, the rehearsal must be carefully planned by the conductor.

The music should be varied and interesting. Care should be used in the sequence of pieces practiced. Selections of a lively nature should be alternated with those of a quiet and meditative mood. Practicing music which is to

be played at a secular concert makes the rehearsal more interesting. Such music is especially welcomed by the players at oratorio rehearsals, where concentrated work is necessary on the recitatives and arias. A hearty laugh is a good tonic for the players. Comments in connection with the selection being rehearsed are interesting and helpful if they are given briefly.

Separate rehearsals for the String and Wind section are valuable, as they save time, and give a chance for attention to details, which is impossible to secure at the full orchestra rehearsal.

The Church orchestra is composed largely of young people high school and college age, but it is advisable to interest the more mature members of the church who are interested, to become members of the orchestra. The enthusiasm of the young group balances the mature playing of the older members. Furthermore, rehearsals can be conducted on a more professional basis, by securing the older and more experienced players as members. A strong string section is of utmost importance. Satisfactory results are possible with a church orchestra, if the conductor keeps the interest and enthusiasm of his players, by carefully planned rehearsals and concerts.

CHAPTER III

THE ORCHESTRA AS A SOCIAL FORCE



An orchestra is a cooperative enterprise, made up of individuals playing together under the will of the conductor. It is essential for them to be a euphonious body, coordinated in their efforts, each doing his part to obtain the desired result. The element of teamwork must be manifest in the orchestra, just as it is in athletic games. The ideas of each player will then be submerged for the good of the orchestra. Many times this is not easy to do, yet in this fact lies one of the benefits a young player derives. While learning to cooperate with the other person, in the orchestra, he is receiving a valuable lesson; in the game of life. People of various nationalities and creeds are often found in a single church orchestra. To illustrate: The following nationalities are represented in one church orchestra in a New England city: Norwegian, Hebrew, Irish, English, Italian, Scotch, Albanian, and Canadian. Inter-racial brotherhood is a direct product of these young people playing in the same orchestra. Their differences are forgotten, and they become as one under the leadership of the director. In many cities, churches hold union services on special occasions. The choirs are combined into one body. Such cooperative endeavor brings the churches closer in the spirit of brotherhood. A community orchestra from a Missouri

city played at the International Sunday School Convention, held at Kansas City, Missouri in 1923. The sixty members of this organization represented the various churches of the city from which they had come. Similar results have been attempted with success in various parts of the country.

Cooperative effort in building and carrying on an educational program of music and worship is possible in any community, whether large or small. All the while the churches cooperating will continue in the consciousness that they are leading their people in the way of "more abundant life".

The music used in our churches is not the product of any one faith or religion. Our hymnals contain music of the four great faiths, Jewish, Russian-Greek, Roman, and Protestant. This shows the freedom of the music used by different faiths, and the universality of music. Music is the "birthright of all peoples". It makes no difference to the Protestant that many of the hymns he uses, come from other faiths. "Lead Kindly Light" and "Faith of our Fathers" come from the Roman Catholic faith. "Immortal Love, forever full" come from the pen of a Quaker, while "Abide with me" and "Sun of my soul" are from the Church of England. It does not occur to the Trinitarian to refuse to sing "In the cross of Christ I glory", yet it was written by a Unitarian. How true are the words of the hymn:

"We are not divided,
 All one body we;
 One in hope and doctrine,
 One in charity."

It has been said that we may go from church to church, from faith to faith, and yet there is a common heritage of hymns and music that makes us feel, in some degree at least, that we are worshipping with kinfolk. We are bound together in fellowship- Christians of all ages, lands, races, tongues, creeds, and faiths. No wonder that Martin Luther once said "Music is the art of the prophets." Music is independent of race- greater than any spoken language, for that is local. Music does not belong to a favored few, but to everybody.

There is a crying need for a church program that will reach and touch the hearts and lives of our young people. The churches are now beginning to realize that music is one means of accomplishing this goal. An educational program of music is needed which will be effective and spiritually worshipful. Such music must be founded on the highest ideals, have the power of real religious uplift, inspiration, and experience. There is no artistic means of getting at the external springs of feeling in the popular heart that can compare with music. It would never have been so magnified and honored as a means of religious expression and impression, if it did not have a personal value to those who produce it, and to those who hear it. It gives the sweep of emotional momentum needed. The

Handwritten text at the top of the page, possibly a title or header.

The following text is a transcription of the handwritten document. It appears to be a letter or a report, written in a cursive script. The text is somewhat faded and difficult to read, but the following is a transcription of the visible content:

My dear Sir,

I have the honor to acknowledge the receipt of your letter of the 10th inst. and in reply to inform you that the same has been forwarded to the proper authorities for their consideration.

I am, Sir, very respectfully,
Your obedient servant,
J. H. [Name]

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orchestra may be defined as producing "pure music"- that is music without words. In choral music, much depends on the text, whereas instrumental music has no such limitations yet it does have a definite moral and religious power. Emotion is as indispensable to music as love is to religion. We cannot imagine music without all the emotions of mankind, for it is a presentation of emotional experience fashioned and controlled by an over ruling intellectual power. Emotional expression is a necessary element in the work of Religious Education, and must be a part of the technique used. A body of emotionalizing data is needed. Christianity is the religion of whole-mindedness. The emotional side of our being- the side so often neglected- this side should be developed. It is the business of the church to help in this. Music and drama aid in accomplishing this result. They are an important equipment of the Religious Educational system.

This emotional expression may be realized in the orchestra. The actual experience of playing or singing makes articulate something within one which never finds expression in words or acts. It permits the players to create beauty, instead of standing outside of it. This cultivation of the beautiful is especially important in the education of the child, for a perception of beauty comes thru education. We must preserve in children that ideality which is one of the most precious possessions of childhood.

To illustrate this cultivation in the realm of music we can recognize that the child who plays the violin gets

more out of it, than the one who plays the piano. The violin is a human thing- the tones made from playing the violin are yours. The child learning to play this instrument does not have a ton of mechanical hindrance to cope with. Children must learn to love music and not hate it, because they are driven to practice. Technical proficiency is not the desired end, unless with it comes taste and understanding. Playing a musical instrument is one way for the child to come into intimate contact with beauty. It increases the activity of the ear, eye, and mind. One of the best arguments in favor of children learning to play a musical instrument is that it will make them self expressive. One cannot know the love of music until he has dealt with it, and it becomes a part of his being. The true influence of church music, whether it be instrumental or choral, is to deepen the emotions. If this is accomplished, music has fulfilled its mission.

Little needs to be added concerning music as a co-worker with Religious Education in unifying the churches and church schools of a community. Cooperative efforts to render a program of music will be successful if properly planned. There is no more effective way to make religious teaching attractive than to combine it with music. One of the privileges and responsibilities of the religious educator is to release this body of religious truth, which is bound up in the sacred instrumental and choral works, and in the

rich liturgy of worship which is the heritage of the Christian church. It is often difficult to remember a sermon, but one may easily remember the fine and spiritually uplifting music which he has heard. Thus music attracts, compels attention, insures remembrance of the truth taught, puts religious truth into the life in such a manner that it will be freely re-expressed, and proclaimed; music creates the atmosphere and mood favorable to development of true Christian character and life.

CHAPTER IV

THE ORCHESTRA AS A REDEMPITIVE FORCE



In following the course of great religious movements, one is impressed by the emphasis laid on music as a factor in evangelization, and as a means of attracting to their ranks unbelievers. It is a powerful aid in touching the hearts of people and awakening emotional response. There have been few reformers who have not given special attention to music. The great reformation movement in Bohemia gave the world its first Protestant hymnal. John Huss became interested in music, as a factor in religious endeavor.

The Swiss reformer, Zwingli, was the most highly cultivated musically of the reformers. He had considerable talent both in playing and singing. It is said that he could play seven instruments. He used his musical gifts to great advantage in religious work.

The Reformation exercised a powerful and far-reaching effect on sacred music. Luther was acutely conscious of the people's need for music, by which they could express themselves. He insisted that music should be taught in the public schools. One of the theses which was nailed on the door of the church at Wittenburg, demanded that the people be permitted to sing in religious service. It was Luther who developed the stately chorales which were written expressly for the people to sing. Undoubtedly Martin Luther did as much for the reformation by his hymns as by his translation of the bible. "A mighty fortress is our God" became the Marseillaise of the Reformation.

The Moravian brethern with whom the Wesleys came

in contact during their journey to America, were noted for their singing. The work of Charles Wesley in religious music is well known. Over one hundred hymns from his pen are found in the "Methodist Hymnal". John Calvin considered music an essential element in the work of the church, and he also caused a school to be founded for the purpose of teaching the young to sing, and to later qualify for leading the music in church.

It is impossible to estimate the value rendered by music to the great revivals, both in years past, and of our own time. Dwight Moody acknowledged his indebtedness to Sankey in his evangelistic work. Music has always played a prominent part in the evangelistic efforts in America, although the standard of the music used, has fallen, yet the need of music is recognized.

Music, then, has been used as a redemptive force in the past. Why may we not appeal to the art of music now for aid in the work of the church? Each year our churches lose thousands of young people from their ranks because they fail to reach and hold them. What causes this failure, and what is the remedy? These questions confront us. The American boy and girl today receive excellent orchestral and choral training in the public schools. Children and young people have a freer and more unaffected love for music than do adults, for love of good music comes natural to them. Many of the young people in our churches play a musical instrument. When

an orchestra is organized and given a place in the musical program of the church, young people who now have little or nothing to do in the church will be interested. But when they become members of the church orchestra they come to have a definite function in the service of the church. Before joining the orchestra in all probability the most they had done for the church was to pass the collection plate- a pitiful job for a young man full of life and energy! When he joins the orchestra he should be made to feel that he is making a real contribution to the welfare of the church. He will be much less likely to decide that the church holds nothing for him.

No young person can be exposed to good music without it having a widening influence for good on his character. Professor H. Augustine Smith of Boston University has said "To sing the "Messiah" from score is to come close up to a master and his utterance and to be converted to better living by this intimacy with the Bible and oratorio inspiration".

The conductor of the orchestra has the chance to be of help to his players in giving advice and counsel on the many problems which come up in every persons life. It may be regarding the best studies for them to take at school, and again it may be helping the youth decide what vocation he intends to take up. The conductor thus becomes

their friend and advisor. In these capacities he has the chance to influence in a definite way the young people who are under his leadership. The mutual love of music brings the player and director in a close bond of union. Young people in the orchestra who have the hope of being future musicians, will naturally look up to the director for help in their problems. In this way he helps in the formation of the character and ideals of his players.

There is a vital influence of liturgy and worship on youth, thru music. This is brought about in the Church School and in the opening part of the regular church service. The teaching of the church hymns is an important part of the work, for they will have a lasting effect on those who sing them.

A small orchestra may be organized in the department of the Church School. The several members who play an instrument may be asked to bring them, and assist in the hymn service. Miss Edith Lovell Thomas, an authority on worship has written "Art gives beauty and attractiveness to religion, and religion gives content and genuineness to art. We should use music which develops themes taught in class; music should be used which develops the aesthetic sense, and cultivates the imagination." The orchestra must enter into the spirit of the hour, and the leader must understand the nature of service that is to be rendered. Music occupies a large part of the period devoted to worship.

Care should be exercised in the choice of music which is to be presented at the worship service. Both instruction and expression are necessary in the well rounded worship program. It is not too much to expect each member of the Junior department to memorize thirty hymns during the year. What a great storehouse of wealth will be built up, since hymns express the great truths of Christianity, in a simple yet effective way.

The consecration of talented young musicians to service in the church is an important step, that brings them into close connection with this institution. The church should recognize the profession of leadership in religious music and worship, take possession of her talented youth, and train them for service. It will cost money, but is it not a better investment than spending large sums of money for professional soloists. Moreover, the education of youth is an investment in souls. Through personal service, during a time of uncertain altruism, we will be able to tie them to the church.

In the proposed church orchestra, there will be boys and girls of adolescent age. During this period, youth responds most easily to suggestion. They cannot be commanded but they can be led by the suggestion of those they love and admire. The intermediate boy will choose as his companion a man, in preference to a boy of his own age.

During this age, as at all others, consciousness

is motor. To think a thing is to do it, unless there are inhibiting influences. For this reason, every effort should be made to shield youth from evil. The church is the place for the boy, and no expense can be too great to keep him there.

It is important to interest the adolescent boy and girl in good music, or if they are already interested, direct this interest in the right channels. The adolescent boy should not be in the choir while his voice is in the process of change. In many cases he has learned to play a musical instrument at school. By enlisting him in the orchestra at the church we are insuring his loyalty.

Walter S. Athearn in his book the "Church School" says:

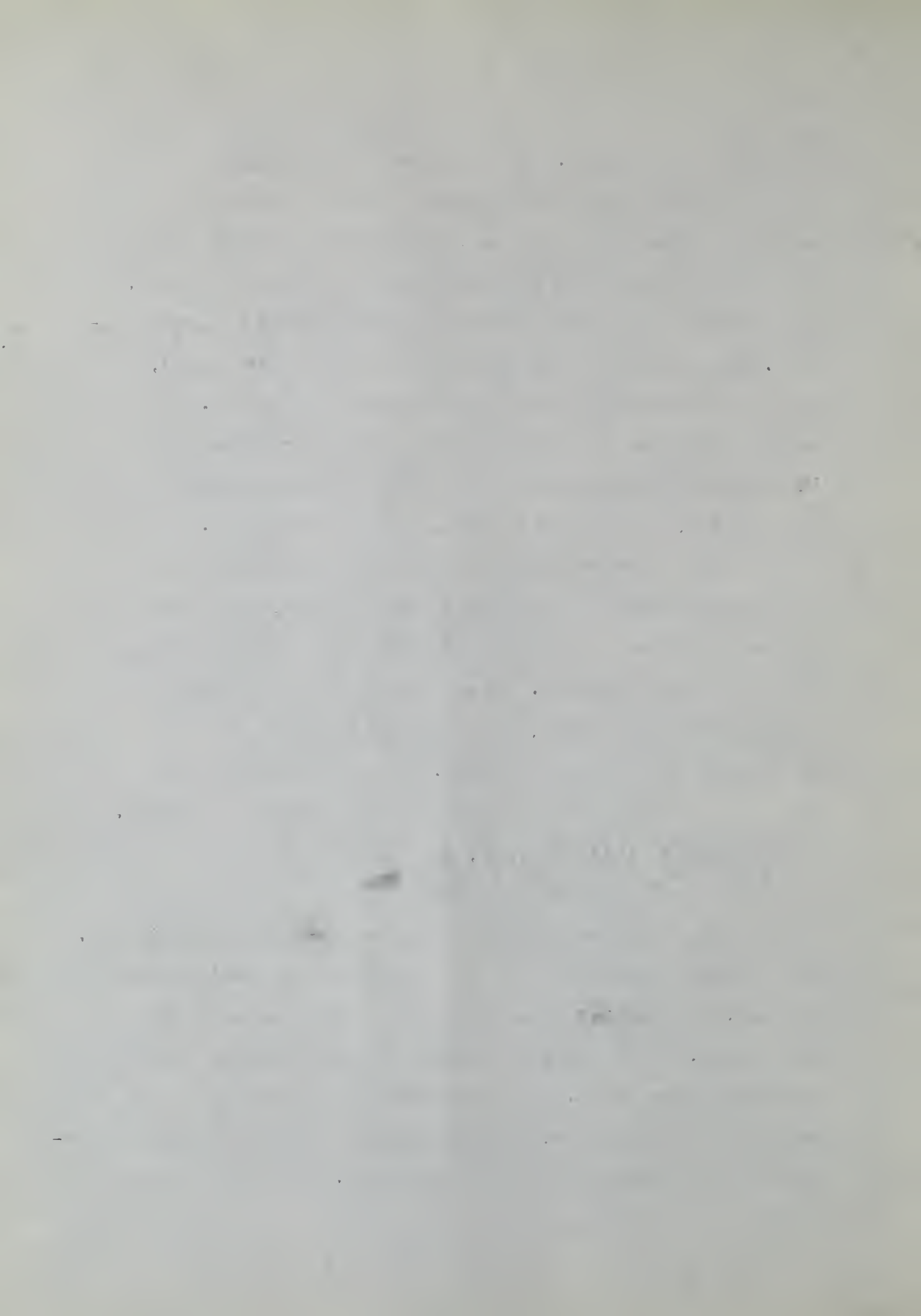
"Not infrequently boys are lost to the church because they are permitted to drop out of the song service at the time of the so-called break in their voices...this should be prevented. By adapting the music he may be kept in the church school, during the entire period of adolescence."

The orchestra is one solution of this problem. The aesthetic nature of youth blooms out at this period. The beauties of nature and the harmonies of color and sound find heightened response in the soul of youth- both boy and girl. The discovery of inner meaning in all things deepens to religions, and turns authority into experience. Religion is no longer objective- it becomes personal and

intimately subjective. The child has learned about God; the adolescent youth now personally experiences God and religion becomes his very own. Prayers once directed out into the skies are now directed down into the inner self, where God speaks to the soul in the most intimate companionship. He speaks to youth in a very real way thru music, and the youth comes into a deeper spiritual living. The Church School which fails to present the Christian life in such vivid imagery that it begets joyous response in young lives, has failed at the most critical point.

The songs which the youth sings and plays during this period deepen his religious experiences, and bring him into fellowship with the Heavenly Father through songs of praise and adoration. Nature ripens youth's social impulses and sympathies, and their emotions bring them in contact with common humanity. There is need to give form and direction to these impulses in definite channels. Music fulfills this function, and at the same time emphasizes the brotherhood of man.

The adolescent age is the formative period of ideals. An ideal is an idea shot full of feeling- an emotionalized concept. This belief is at the root of the personalistic philosophy. We should have a place for the ideal in the teaching of the child. Ideals are the motivating influences in life. From our life, control emulates through the intellect- a world of knowledge, dogmas and creeds. We realize control



through the will, which is closely related to our instincts and impulses. It is a world of conduct and obedience in the largest sense. Finally, we gain control through the emotions- the sympathetic nervous system; it comes thru the world of appreciation- by contact with art, literature, and music. All well rounded religions embrace these three fields. If we are to be all that we should be, all sides of our nature should be developed. Christianity is the religion of wholeness.

Ideals are a forecast of what we may be. They have objective reality, and they are a type of condensed experience. We find many types of ideals. Personal ideals and traditional ideals may be handed down to us. The very essence of the ideal is that the image is not realized. The selection of models is closely allied ideals. Imitation is a potent factor in the education of youth. It is one of the earliest, deepest, and most tenacious of human instincts.

In the selection of "models", young people should choose only those which are best. If models are to be copied, and they certainly are, there should be a standard model set up. The teacher should help the pupil select the right models and ideals. These ideals should be big and broad, and they will be if those making the choice associate with the finer things of life- reading the best books, hearing the most worthwhile drama and music. The development of the ideal is both intellectual and emotional. The latter is the more important of the two. The emotional side gives our life directive force. Art, literature, music,

and religion are media for the transmission of ideals, and as such fulfill an educative function far greater than often realized.

The director of music in the church should see his duty clearly. Because we are idealists and try to instill into others the highest and truest ideals, we need not set aside material things. In every town and college young men of fine parts are daily stooping to mean, base, and unclean living, against their conscious and nobler instincts- almost against their own wills. Convert these youths into idealists; show them the real values; lift their eyes to see the higher meanings and possibilities of life. Fill them with Truth, Justice, Love, and Righteousness. Then will the less important things have no place. If we fail to present to the coming generation these higher virtues, and instill in them the better things of life, our nation is bound to decay and rot, and our young people will not be strong and worthwhile. But instill in them these virtues, and they will possess a rare jewel of priceless possession, which will not tarnish or grow dim, but one which will shine brighter as the years go on, radiating with the worthwhile things of life. As educators, our lives will have not been in vain, if we have instilled into youth these high ideals. A generation will come which will not falter, but will be one that will hold the standard high, marching on with the banner of Righteousness and Truth. Their lives will be in accord with His, and

The first part of the document is a letter from the President of the United States to the Congress, dated January 3, 1801. The letter is addressed to the Senate and House of Representatives, and is signed by James Madison. The letter discusses the state of the Union and the progress of the government since the inauguration of Thomas Jefferson. It also mentions the recent election of Madison as President and the transfer of power to the new administration. The letter is a formal and important document, and it is followed by a series of resolutions and reports from the various departments of the government. The document is a comprehensive record of the early years of the new republic, and it provides a detailed account of the challenges and successes of the young nation. The text is written in a formal and official style, and it is a valuable historical document for anyone interested in the early history of the United States.

they may sing with true feeling:

"O Lord and Master of us all
Whate'er our name or sign,
We own thy sway, we hear thy call,
We test our lives by Thine."



CHAPTER V

THE ORCHESTRA IN THE MUSICAL PROGRAM

OF THE CHURCH AND CHURCH SCHOOL

THE
LIBRARY OF THE
MUSEUM OF NATURAL HISTORY
AND
ZOOLOGY
OF THE
CITY OF BOSTON

The size and type of orchestra suitable for use in the church is dependent largely upon the size of the church and the acoustics of the building. The size is also dependent upon the membership of the church, and the material available.

An orchestra of eight or ten pieces will be of valuable assistance in the musical program of the church if the proper balance is secured. An orchestra of this size should have at least four violins, a viola (or a substitute third violin part), a cello, flute, clarinet, trumpet, trombone and piano. It is often impossible to obtain such an instrumentation, and in such cases, a sacrifice should be made in the size, rather than using a poorly balanced group, overheavy in wind instruments.

At the start, a small organization is advisable, which may be added to from time to time. The final result will be much more satisfactory. No attempt should be made to use the orchestra at a public service until they have attained acceptable proficiency in private rehearsal. When this stage is reached, there is a definite place for them in the musical ministry.

First in importance is the evening service. The orchestra should always be used in a dignified manner, playing music suitable for the service. The orchestra may be used instead of, or in conjunction with the organ recital

which is popular in many churches. Three or four suitable selections may be played. Special care should be exercised that the last of the numbers creates the right spirit for the opening hymn. It is essential for the director of the orchestra to work in cooperation with the one in charge of the service. At times it may be better to use one number only at the beginning of the service. In this case, the orchestra will play at later intervals in the service. The entire service will be one of inspiration and worship if care is used in the choice of selections, as to sequence, place in the service. The main thing is that the entire service be unified.

The showy piece which merely amounts to display, should be avoided. The prelude, whether played by organ or orchestra should as a rule be meditative, rather than boisterous, noble rather than amazing, sweet and solemn rather than fanciful, and emotional rather than learned.

The orchestra can be used with the other parts of the service to build up a definite climax. For example: During the Lenten season, the entire musical and worship service should lead to the quiet talk to be given by the minister. The orchestra will lend valuable assistance in special services. e.g., "Service of darkness to light" or a "Glory of God in Nature service", or an "oratorio and symphony service". (See appendix)

The orchestra should be used for the support of

the congregational song service. It is a delight to sing to the accompaniment of a good orchestra. This part of the service has a definite religious purpose. The orchestra should not take the place of the organ, but should add its voice to heighten the effect. It is essential for the orchestra to be in tune with the organ. There is nothing that will defeat the end and aim of a congregational song service sooner than an orchestra out of tune with either the organ or itself. The orchestra must be responsive to the direction of the song leader.

In playing for the song service, many varieties of effect are possible. Full orchestra; Full orchestra with organ; organ; strings with organ or alone; voices alone; solo orchestra instrument with organ (violin, flute, cello, trumpet or horn); Brass with organ; brass quartet with voices; muted strings (effective with quiet hymns "Abide with me" or "Now the day is over"). These suggestions are some of the many possible combinations which will lend to the effectiveness of the hymn service. A trio or small ensemble of instruments (violin, flute cello, horn, and organ for example), playing softly while the audience reads silently or hums the hymn, makes a lasting impression of both audience and players.

Nothing sounds worse than the full orchestra and organ playing "forte" thru an entire hymn, with metronomic precision. A variety of effects are necessary to make the service all that it can be. Hymnody is the nucleus of our

church music and we should make the most of it. Hymn singing has three general purposes: Firstly, it stimulates praise and prayer to God. Secondly, It stimulates religious sentiments. Thirdly, It strengthens the sense of brotherhood. Hymn singing may be called successful when it affords an avenue for true approach to God in earnest and noble worship. Hymns are expressive rather than impressive exercises.

A well balanced orchestra is a substantial addition to the organ for congregational singing, for it lends a full body of tone which is inspiring. It is especially beneficial in a large, well filled church. The orchestra should play with contagious enthusiasm. The needs of the congregation should be kept foremost in the mind of the director, rather than displaying the possibilities of the orchestra. Singing depends fundamentally on the attitude of the people's minds, and this in turn rests largely on the leadership provided. The spirit of the choir, orchestra, and director is of the utmost importance. Their attitude should be cordial, sympathetic, animated by a sincere desire to encourage activity on the part of the congregation.

Such catastrophies as prolonged tuning before the hymn, failure to find the number and consequently failing to begin together, failure to follow the dynamic indications of the conductor- such errors as these mar the spirit of the service. It is better to use only the organ if such

difficulties cannot be overcome. However, with careful planning, the service will go smoothly.

There should be provided for each player a complete program of the service, with such details as the number of verses on the various hymns, amen, order of special numbers, and all other necessary instructions.

The hymns should be practiced at the rehearsal as well as the special numbers, for they hold a place of at least equal importance in the service. It is not necessary to use a hymn orchestration prepared by the publisher. Instructions from the director concerning the part each instrument is to take, what verses full orchestra is to be used, instrumentation to be used on other verses—such directions will enable the orchestra to attain a variety of effect which the ready made orchestration cannot meet. Equal balance of tone in the four voices is the main essential. The strings should be divided— the first violins taking the soprano, the second violins the alto, the cellos and violas the tenor, and the bass taking the bass. Such an instrumentation gives the cellos the tenor part, where they will be effective on such hymns as "Now the day is over", "Immortal Love forever full", "I would be true", and "I met the good shepherd". The other instruments should be divided in a way that will give a full and sonorous effect.

If a prepared orchestration is desired, care should be exercised in the choice of it. Some arrangers

with one eye open for "dramatic effects", and the other on the public purse, have the clarinets executing rapid nose dives, while the piccolo lends it voice in trill, chromatic runs, and other colorful effects. These "variation arrangements" are a desecration to the many beautiful hymn tunes which are our heritage.

The orchestra may be of further use in furnishing accompaniment for the chorus numbers. Selections from the various oratorio numbers are to be found in the repertoire of most choirs. The orchestration for the majority of these numbers may be either bought or rented at a reasonable rate. (See appendix) This enables the church equipped with an orchestra and choirs to render selections from the oratorios with orchestral accompaniment. The compositions of Brahms have a rich accompaniment, and it is unfair to expect from the organist a complete orchestral accompaniment. Fully half the beauty lies in the orchestral part of "How lovely is thy dwelling place" by Brahms (#4 in the German "Requiem"). the same is true of Brahms's "Song of fate". The accompaniments of Handel's "Messiah", "Samson", and "Judas Maccabeus", lose much of their vitality when played on the organ. The same is true of the choruses in the "Creation" of Haydn. Churches that have been accustomed to an organ accompaniment with the above numbers, would not be content with it, if they were once privileged to hear the same works given with adequate orchestral accompaniment.

"Agnus Dei" by George Bizet calls for a string orchestra, violin solo, organ, harp, women's voices, and

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soprano solo. The accompaniment to "Panis Angelicus" by Caesar Franck (soprano or tenor solo with mixed voices), requires an organ, harp or piano, and violin or cello.

In many churches the ministry of music supplies the entire program for the evening service several times a year. The church is fortunate if it has at its disposal an orchestra on such occasions. An oratorio or cantata can be given, or several of the best known selections from the different oratorios can be combined with orchestral selections from the symphonies, using movements which are suitable for rendition in the evening service.

The church school is the next most important place for the use of the orchestra. In some instances the Church School orchestra will be the "training school" for those who are not yet able to take their place in the regular church orchestra. The music used by the church school orchestra need not be as difficult as that played by the church orchestra. The main function of the church school orchestra is that of playing the hymns, a prelude, recessional, and occasionally a special selection. This orchestra will be smaller in size, and will often be confined to a single department of the church school. The louder and more brilliant instruments (cornet, trombone, and saxophone) should be judiciously used. It is best not to use them in a quiet, meditative hymn.

The church school orchestra, then, has its place in the opening and closing exercises of the department,

The first part of the paper is devoted to a general discussion of the
 various methods which have been proposed for the determination of the
 various constants which enter into the equations of the theory of the
 motion of the planets. It is shown that the most accurate results have
 been obtained by the use of the method of least squares, and that the
 results obtained by this method are in excellent agreement with the
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 The second part of the paper is devoted to a detailed discussion of the
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 the results obtained by this method are in poor agreement with the
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as they may be used to create the spirit of worship there. Moreover, it will lend interest to the service, add vigor and enthusiasm to the singing, and give the youth an opportunity to be of service in his department.

The regular church orchestra should exist primarily for use in the regular church services, but it may also be used to advantage in week night activities. On these occasions music of a secular interest will be used, which will interest the orchestra, both in rehearsals, and in general enthusiasm.

Regular secular orchestra concerts may be given in the main auditorium of the church to good advantage. For the main part of the program, movements from the symphonies of Haydn, Mozart, Schubert, and others are entirely playable by amateur organizations. There is no reason why we should limit the production of this wealth of musical literature to the symphony halls. Much of the symphonic music is beyond the capabilities of the amateur orchestra. However, there is a field of this music which can and should be used. (See appendix)

On the secular program there is a place for "novelty music". Such music is played by our symphony orchestras at the "Pop" concerts. "March of the little lead soldiers" by Pierne, "Jolly fellows" by Vollstedt, the numerous Waldteufel and Strauss waltzes are good illustrations of this class of music. This light program music gives the needed spice to the program, and is popular with both audience and players.. It is better to play such music than resort

to the saccharine and sentimental music often seen on the program.

Variety is possible in the program by including vocal selections. Valuable experience is afforded the orchestra in furnishing the accompaniment for these numbers. For example: "The Two Grenadiers" by Schumann, "Danny Boy" (Tune Londonderry Air), "Goin Home" by Dvorak, and "Sound an alarm" by Handel. This work prepares them for the more difficult task of furnishing the accompaniment for the oratorio or cantata.

The secular orchestra concert may be used to raise money for further musical activities in the church, or to enlarge the orchestral library. A successful plan put in use at Lynn, Massachusetts, was to charge an admittance fee at the secular concert, and to later give an oratorio at Christmas time. At this service, the doors were thrown open to the community. The money taken in at the preceding concert provided the music committee with the necessary funds to give the oratorio.

A music festival may be given by a single church, if the budget is sufficiently large to cover the expenses, but such an undertaking is more often a community enterprise. At such a time, the various churches of the city assist in every possible way. However, the individual church may give two or three oratorios each year, and thus bring their members into frequent contact with this type of music.

The orchestra needs a strong string section to

furnish adequate accompaniment for oratorio music. The music should be procured several weeks before the performance, and rehearsed until the orchestra is able to play the music with precision and confidence. If the orchestra is to accompany the soloists, it is necessary to plan at least one rehearsal with the soloists. In the chorus work, the conductor should maintain a proper balance of tone between choir and orchestra.

The "Messiah" is given in many churches as an annual event. In some instances it has become necessary to give the program two times to accomodate the audience. If possible this event should be free, the object being to instill in the people a greater appreciation of this music. The music committee may invite the choirs of the neighboring churches, giving them special recognition by providing reserved seats for them. This plan was carried out recently, and one choir fifteen miles distant accepted the invitation to visit the church that was giving the oratorio. The entire choir of forty heard the performance, and the next year that church gave an oratorio in their own town.

Orchestra members will have an opportunity to furnish music at the various entertainments, plays, pageants, socials, Y.M.C.A. meetings, and other church meetings. They will be of assistance in the "sing", and also play special numbers. Such work affords valuable experience for the less advanced members of the church orchestra, who with the

help of two or three of the experienced members, will make a creditable showing. When a church once discovers she has young people who are willing to help in this way, there will hardly be a week pass, that some organization does not desire the help of a small orchestra. The church will come to have a deeper appreciation of its young people, because of their help at such times.

Radio broadcasting is a new feature which has entered the life of every community. The broadcasting station will be glad to extend to the well-trained church orchestra an invitation to give a concert. This is a stimulus to the players of the orchestra toward better work, and at the same time is advertisement for the church, and classes it as a live institution. Many strangers will be attracted to the church when they hear the orchestra play, and may be induced to attend its services, and finally become members.

Church members will "listen in" when their orchestra plays over the radio, and they have been known to write to friends, advising them to hear the concert. An interesting illustration is connected with a certain church which was scheduled for their orchestra to broadcast on a Friday evening. One of the prominent members of the church brought his radio to the prayer meeting service, tuned in, and by means of the loud speaker, all present listened to their orchestra broadcast. Another member of the congregation

1. The first part of the paper is devoted to the study of the properties of the function $f(x)$ defined by the equation $f(x) = \sum_{n=0}^{\infty} a_n x^n$, where a_n are the coefficients of the power series. It is shown that $f(x)$ is a continuous function of x and that it satisfies the functional equation $f(x) = f(x^2) + x$. This equation is solved by the method of successive approximations, and it is shown that the solution is unique.

2. In the second part of the paper, the properties of the function $f(x)$ are studied in more detail. It is shown that $f(x)$ is a monotonic increasing function of x and that it is concave down. It is also shown that $f(x)$ is a solution of the differential equation $f'(x) = 1 - f(x)$. This equation is solved by the method of separation of variables, and it is shown that the solution is unique. The function $f(x)$ is then shown to be a solution of the functional equation $f(x) = f(x^2) + x$.

3. In the third part of the paper, the properties of the function $f(x)$ are studied in more detail. It is shown that $f(x)$ is a continuous function of x and that it satisfies the functional equation $f(x) = f(x^2) + x$. This equation is solved by the method of successive approximations, and it is shown that the solution is unique. The function $f(x)$ is then shown to be a solution of the differential equation $f'(x) = 1 - f(x)$.

4. In the fourth part of the paper, the properties of the function $f(x)$ are studied in more detail. It is shown that $f(x)$ is a continuous function of x and that it satisfies the functional equation $f(x) = f(x^2) + x$.

had written to friends and relatives in five states, asking them to tune in, that they might hear his church orchestra play. The orchestra surely added its influence in the work of that church.

CHAPTER VI

THE ORCHESTRA IN THE COMMUNITY

The orchestra possesses a real power to weld together socially disorganized communities. Thomas Whitney Surette in his book "Music and Life" says:

"Music has the power to break down artificial barriers in the community. People are brought into sympathy with each other and community music is then a reality. Anyone who has ever had personal experience in bringing fine music to those who cannot afford to attend concerts knows that such people are as keen for the best as are those who can afford it....In what are called the "slums" of the greatest American and English cities, I have seen hundreds and even thousands of poor people listening to the music of Beethoven, and to a few simple words about it in rapt and tense silence, and have heard them break out in unrestrained applause as comes only from those who are really hungry for good music. Put a good orchestra into any one of these places and you will find the best kind of an audience...the best kind of social uplift would be something that made people happier. The real uplift is of the soul, not of the body."

In the large majority of our American cities, a chance is seldom afforded for people to hear the best class of music. What would it mean to these people if they were able to go to a church or community center in their part of the city to hear a fine concert at a fee well within their means. This is the mission of educational

music. The church can help in a real way in this program of giving to the people the best music. The average man and woman is potentially musical. The world of music is a true democracy. The chief need is to make music ourselves.

The church orchestra can give concerts in the church and open the doors to the community. At other times, on special occasions the church and school orchestras and combine into a large orchestra, which provides music for the occasion, whether it be Christmas, Thanksgiving, or a patriotic celebration. The playing will not be as artistic as from a small group, but that is not everything. Such an orchestra is the product of the community, made up of its own young people. The audience will join in the singing more heartily because their children are furnishing the music. People will forget their petty differences and will join together in the spirit of brotherhood. The entire community will learn to work together in cooperation and good will, because they have been welded together by that intangible element called music.

Once a community catches this vision of working, singing, and playing together, the entire community spirit will be transformed. The community Music Festival is one project which should be fostered by the leading musicians of the town. To some cities this means hiring high priced soloists to come and sing at the people in a language they do not understand. This is not the type of music festival which will do the community the most good. Let the people of the community make their own music. Have a community

sing, accompanied by a community orchestra. The civic choral society made up of members of the church choirs, and other singing societies, will present an oratorio. Another evening the Community orchestra will have charge of the music. The program will naturally need to be adapted to the talent available, size of the town, and other considerations.

We find the community backing Sunday afternoon concerts given by the community orchestra or band, in the municipal auditorium or one of the largest churches of the town. An appropriation is made by the city for the expenses of the organization, and it becomes a community project, supported and enjoyed by the people. The churches gladly lend their support when they see the value of the project. These programs will materially aid the crusade against secular Sunday amusements which prevails in many of our American cities. People will have no desire to go to the movie for the advertised "Special Sunday Musical Treat", when they can go to hear the best of music given by their own young people, backed by the more experienced musicians of the community. The public schools will be glad to cooperate with our churches in establishing such a program. This plan is being pushed in many of the western cities.

Many of the young people are in both the public school musical organizations and the church choir and orchestra. It is natural for these two factions to

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combine in a community project. This is especially true in the smaller cities and rural towns. In some cases the concerts will be held in the main auditorium of the school building. The director of music in the schools may be the one to lead the choruses and the orchestra.

Music in the public schools is one of the most encouraging signs we have. The public school systems afford a significant opportunity for influencing the musical taste of the community. It brings beauty into the lives of all the people. Community music is a sociological phenomenon as well as an artistic one. Through singing together in an informal way, each individual in the crowd is apt to be drawn closer to the others, to feel more interested in his neighbors. In the case of "sings" where the dominating note is patriotism a deeper spirit of loyal to country and community results. It means the development of a new community consciousness. Outside of the circle there is anarchy, hatred, envy, strikes, and selfishness. Inside there is beauty, peace, a sense of brotherhood and harmony. Community music teaches men and women to find themselves, and to do it in unity and brotherly love. Such is its mission.

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discussion of the problem and the methods used.

2. In the second part, we consider the case of a

single particle and show that the results are in

agreement with the experimental data.

3. In the third part, we consider the case of a

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are in agreement with the experimental data.

4. In the fourth part, we consider the case of a

system of three particles and show that the results

are in agreement with the experimental data.

5. In the fifth part, we consider the case of a

system of four particles and show that the results

are in agreement with the experimental data.

6. In the sixth part, we consider the case of a

system of five particles and show that the results

are in agreement with the experimental data.

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2. The second part of the paper is devoted to a detailed discussion of the various theories of the origin of life.

3. The third part of the paper is devoted to a discussion of the various experiments which have been carried out in order to test the various theories of the origin of life.

4. The fourth part of the paper is devoted to a discussion of the various results which have been obtained from these experiments.

5. The fifth part of the paper is devoted to a discussion of the various conclusions which can be drawn from these results.

6. The sixth part of the paper is devoted to a discussion of the various problems which still remain to be solved.

7. The seventh part of the paper is devoted to a discussion of the various methods which have been used in order to solve these problems.

8. The eighth part of the paper is devoted to a discussion of the various results which have been obtained from these methods.

9. The ninth part of the paper is devoted to a discussion of the various conclusions which can be drawn from these results.

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APPENDIX



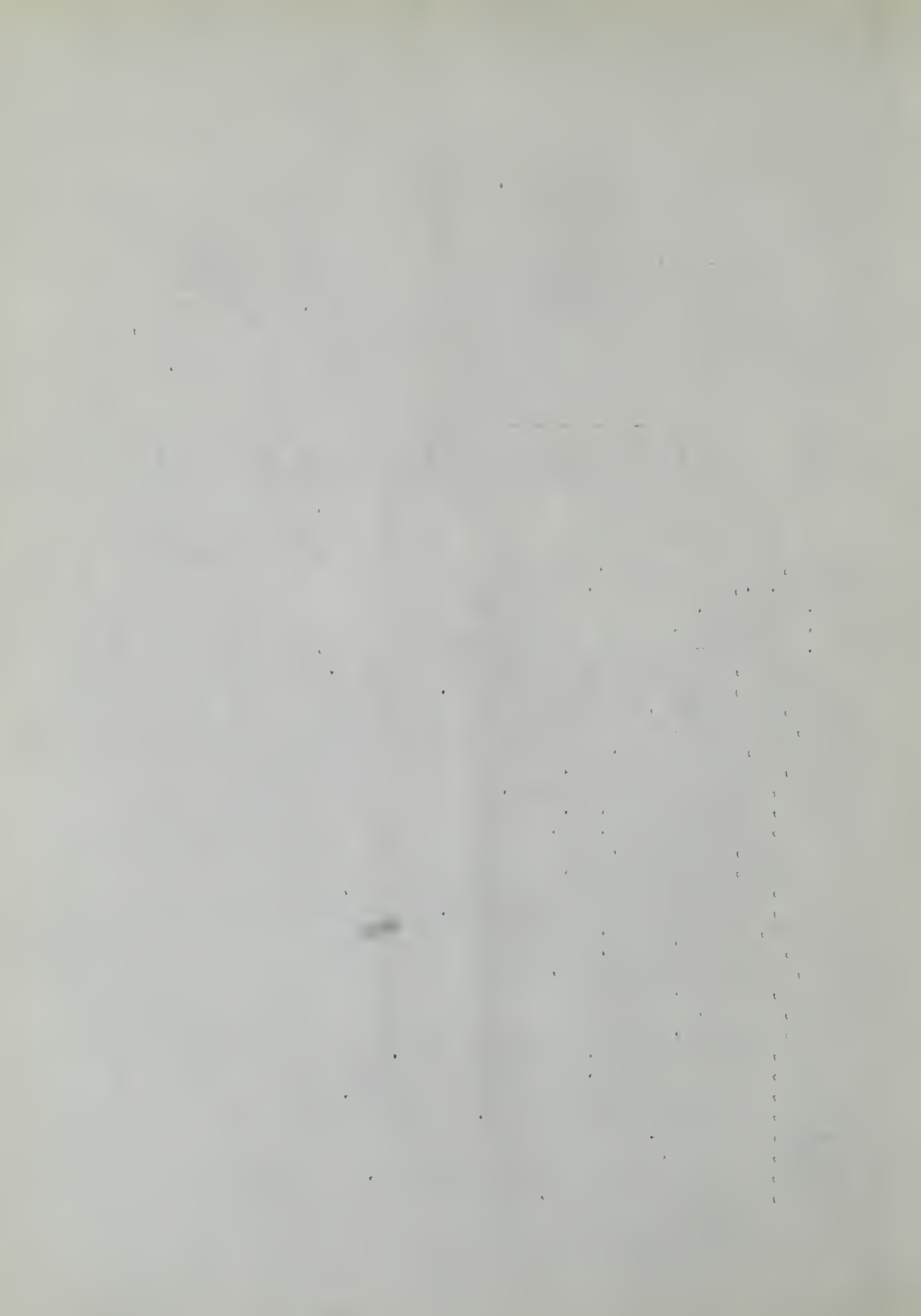
APPENDIX.

Note- This repertoire of Sacred and Secular Concert orchestra music is not meant to be an exhaustive list of compositions available for use in this field. The following selections have been chosen from the library of the writer, and therefore contains only music which has been found adaptable for use by the church and community orchestra.

----- REPERTOIRE OF SACRED ORCHESTRA MUSIC

SUITABLE FOR USE IN THE CHURCH SERVICE.

Adams, The Holy City.
Bach J.S., Bach Suite. (Sc)
 1. Prelude.
 2. Sarabande.
 3. Chorale- "O Thou with hate surrounded".
Beethoven, Adagio from the Sonata Pathetic.
Beethoven, Glory of God in Nature.
Bizet, Agnus Dei.
Bohm, Cavatina.
Borowski, Adoration.
Braga, Angel's Serenade.
Brahms, Wiegenlied (Lullaby).
Calkin, Voluntary No. I.
Calkin, Voluntary No. II.
Chaminade, Serenade.
Czerwony, Evening Mood.
Dvorak, Largo from the New World Symphony. (Sc)
Dvorak, Songs My mother taught me.
Edwards, Inspiration.
Elgar, Salut D'Amour.
Elie, Prayer at Eventide.
Franck, Prayer.
Friml, Adieu.
Friml, Melodie.
Gounod, Credo from St. Cecelia's Mass.
Gounod, Lovely Appear.
Gounod, March Romaine (March Pontificale).
Gounod, Meditation (Ave Maria).
Gounod, Nazareth.
Gounod, Sanctus.
Gounod, The King of Love my Shepherd is.
Gounod, Unfold ye portals.



Orchestra Repertoire of Sacred Music, Continued.

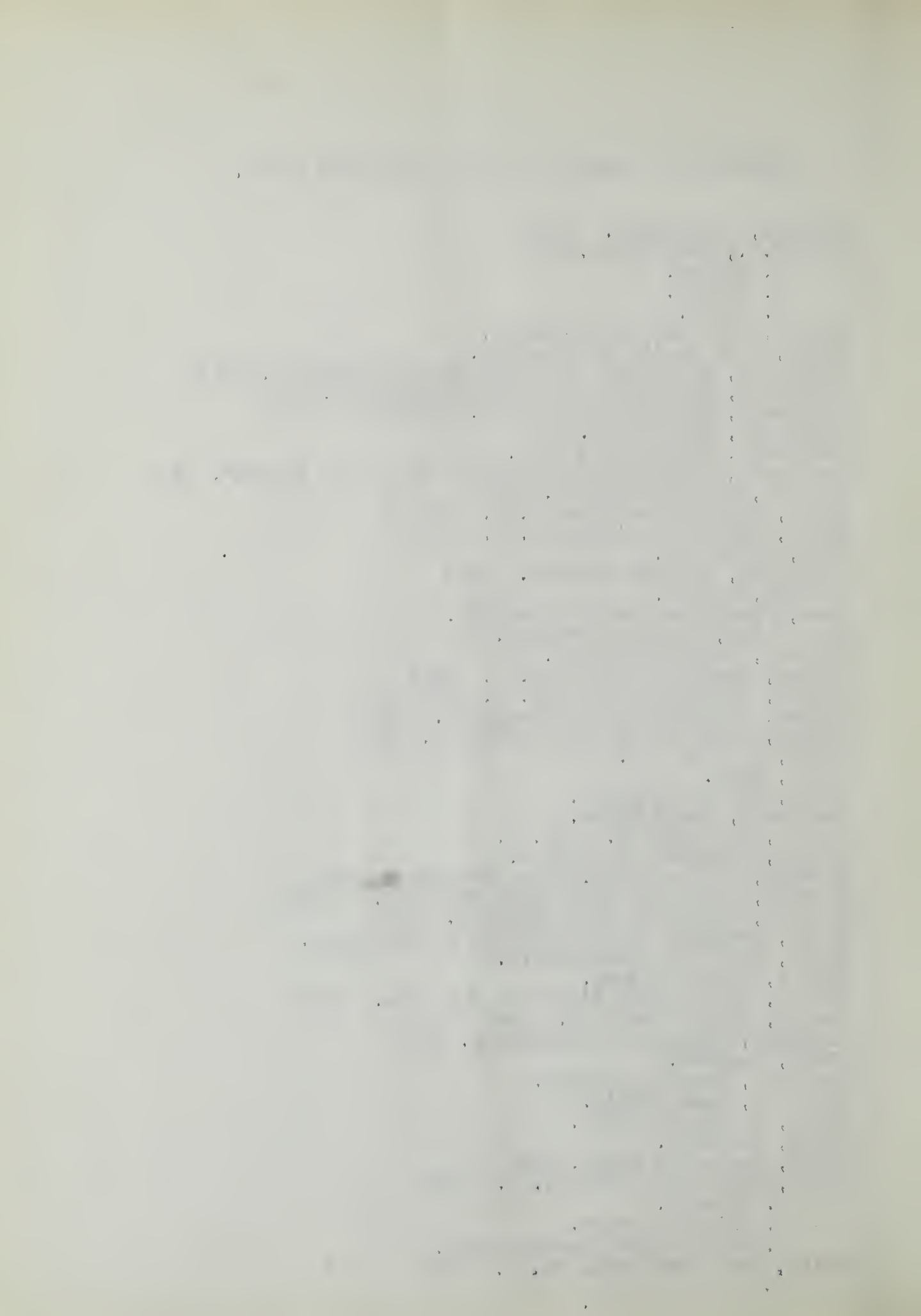
Granier, Hosanna.
Grieg, Ase's Death. (Sc)
Grieg, Heart Wounds. (Sc)
Grieg, I Love Thee.
Grieg, Solveg's Song. (Sc)
Grieg, The Last Spring. (Sc)
Grieg, To Spring.
Godard, Berceuse from "Jocelyn".
Handel, Hallelujah Chorus. (Sc)
Handel, I know that my Redeemer liveth.
Handel, Overture to the "Messiah". (Sc)
Handel, Pastoral Symphony from the "Messiah". (Sc)
Handel, Largo. (Sc)
Handel, Selection from the "Messiah".
Handel, Solemn March from "Joshua".
Haydn, Prelude from the "Creation". (Sc)
Haydn, Slow Movement from the "Kaiser String Quartet". (Sc)
Haydn, The Heavens are Telling. (Sc)
Haydn, With Verdure Clad from the "Creation". (Sc)
Huerter, Melodie.
Huerter, Told at Twilight.
Humperdinck, Dream Music and the Prayer from "Hansel and Gretel".
Klemm, Russian Folk Song.
Kreisler, The Old Refrain.
Koschat, Forsaken (Based on a Hymn tune).
Kreutzer, Shepherd's Sunday Song.
Kunits, Lullaby.
Lemare, Andantino.
MacDowell, Woodland Sketches.
 1. At an Old Trysting Place.
 2. Deserted Farm.
 3. To a Water Lily.
 4. To a Wild Rose.
 5. Told at Sunset.
Mascagni, Intermezzo from "Cavalleria Rusticana". (Sc)
Massenet, Elegie (Melodie).
Massenet, Meditation from "Thais". (Sc)
Massenet, Prelude from "Eva". (Sc)
Massenet, The Angelus.
Mendelssohn, Adagio from the "Hymn of Praise".
Mendelssohn, Cast thy Burden on the Lord. from "Elijah".
Mendelssohn, Chorale from "St. Paul" To God on High.
Mendelssohn, Consolation.
Mendelssohn, For the Mountains shall depart.
Mendelssohn, I Waited for the Lord from the "Hymn of Praise". (Sc)
Mendelssohn, I Would that my love.
Mendelssohn, Lord God of Abraham from "Elijah". (Sc)
Mendelssohn, Nocturne from "Midsummer Night's Dream". (Sc)
Mendelssohn, O Hills, O Vales.
Mendelssohn, Priest's March from "Athalia".
Mendelssohn, Selection from "Elijah".

Orchestra Repertoire of Sacred Music, concluded.

Millard, Veni Creator from "Millard's Mass".
Nessler, Young Werners Parting Song.
Pergolesi, Glory to God in the Highest.
Raff, Cavatina.
Rodney, Calvary.
Rubenstein, Reve Angelique (Kammenoi Ostrow). (Sc)
Rubenstein, Twilight. (Sc)
Russel, Vesper Time.
Saint Saens, My Heart at thy sweet voice from "Samson and Delilah".
Saint Saens, Prelude to the "Deluge". (Sc)
Saint Saens, The Swan.
Schubert, Am Meer (The Sea).
Schubert, Ave Maria.
Schubert, Serenade.
Schubert, The Omnipotence.
Schumann, Nocturnal Piece (Based on a hymn tune).
Strauss, Richard, Dreaming.
Sullivan, The Lost Chord.
Sullivan, Thou art passing hence.
Tschaikowsky, Andante Cantabile from String Quartet Op. 11. (Sc)
Tschaikowsky, Chanson Triste. (Sc)
Tschaikowsky, Reverie Interrompue (Visions) (Sc)
Tschaikowsky, Ye who have yearned alone.
Wagner, Dreams.
Wagner, Introduction and Prayer from "Rienzi".
Wagner, Pilgrim's Chorus. (Sc)

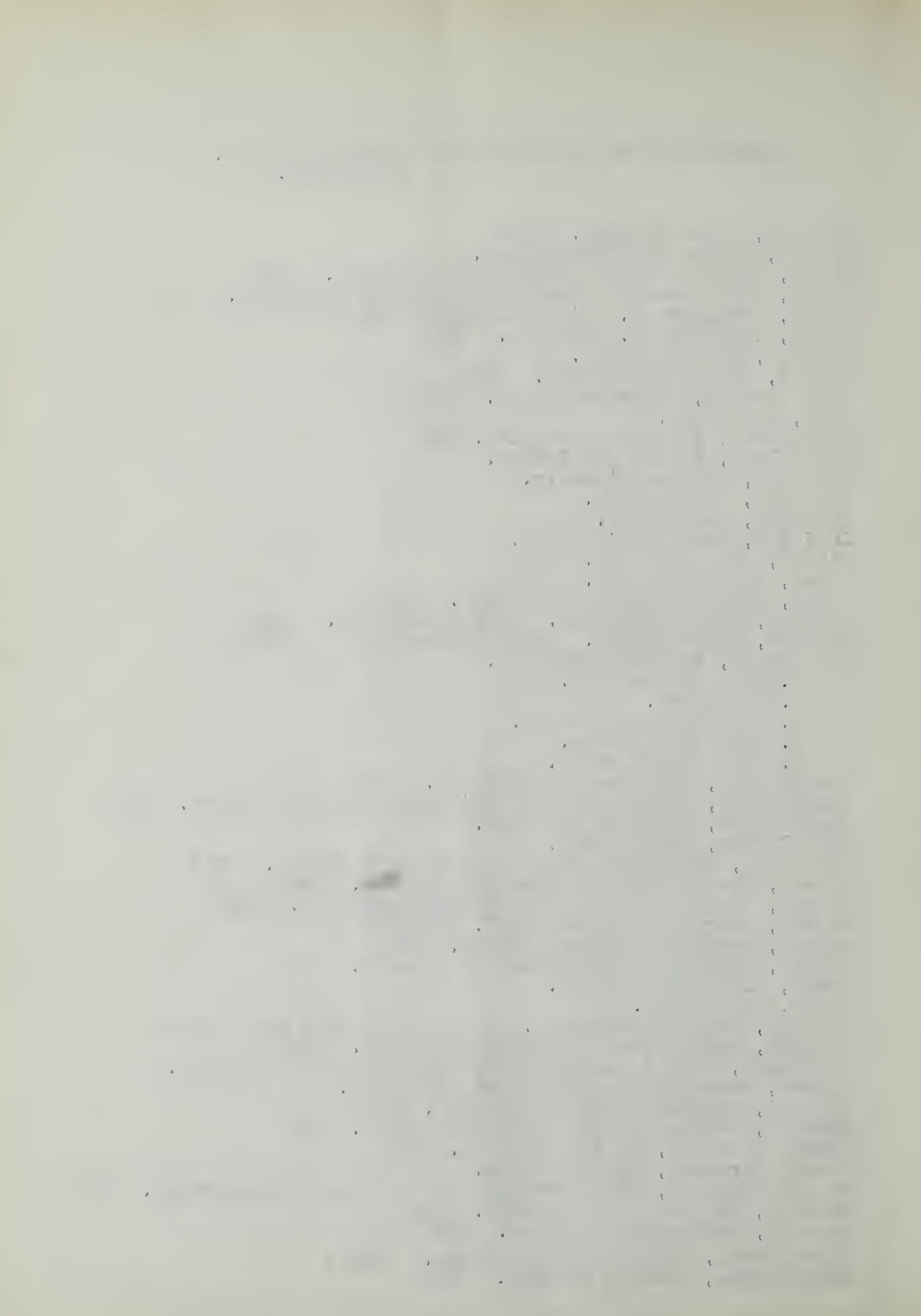
REPERTOIRE OF SECULAR CONCERT ORCHESTRA MUSIC.

- Arensky, Intermezzo. (Sc)
Bach J.S., Bach Suite. (Sc)
 1. Minuet.
 2. Bouree.
 3. March.
Bagley, National Emblem March.
Balfe, Then You'll Remember Me.
Beethoven, Allegretto from the Seventh Symphony. (Sc)
Beethoven, Andante from the First Symphony. (Sc)
Beethoven, Coriolanus Overture. (Sc)
Beethoven, Menuet in G.
Beethoven, Moonlight Sonata.
Beethoven, Turkish March from the "Ruins of Athens". (Sc)
Berlioz, Hungarian March. (Sc)
Bizet, Suite Arlesienne No. 1. (Sc)
Bizet, Suite Arlesienne No. 2. (Sc)
Bohm, Sarabande.
Boieldieu, La Dame Blanche. (Sc)
Bolzoni, Minuet.
Bosc, Marche des Petits Pierrots.
Blon F von, Serenade D'Amour.
Boulton, Aces High March.
Brahms, Hungarian Dance No. 5. (Sc)
Brahms, Hungarian Dance No. 6. (Sc)
Brahms, Second Hungarian Rhapsody. (Sc)
Brahms, Academic Festival Overture. (Sc)
Brown, All for You.
Brown, Baby.
Brown, Winter Memories.
Chaminade, Scarf Dance.
Chopin, Nocturne Op. 9 No. 2.
Chopin, Polonaise Militaire.
Debussy, Petite Suite. (Four Movements) (Sc)
Delibes, Ethiopian Dance from "Sylvia". (Sc)
Delibes, Pizzicato from "Sylvia". (Sc)
Drigo, Serenade to the Millions of Harlequin.
Elgar, Pomp and Circumstance.
Finden, Kashmiri Song.
Flotow, Allessandro Stradella Overture. (Sc)
Godard, Adagio Pathetic. (Sc)
Goldmark, Overture to Sakuntala. (Sc)
Gluck, Gavotte.
Grainger, Country Gardens.
Grainger, Mock Morris.
Grieg, A Primula Veris.
Grieg, Notturmo.
Grieg, Norwegian Dance. (Sc)
Grieg, Peer Gynt Suite No. 1. (Sc)
 1. Morning.
 2. Anitra's Dance.
 3. Hall of the Mountain King.
Grieg, Peer Gynt Suite No. 2. (Sc)



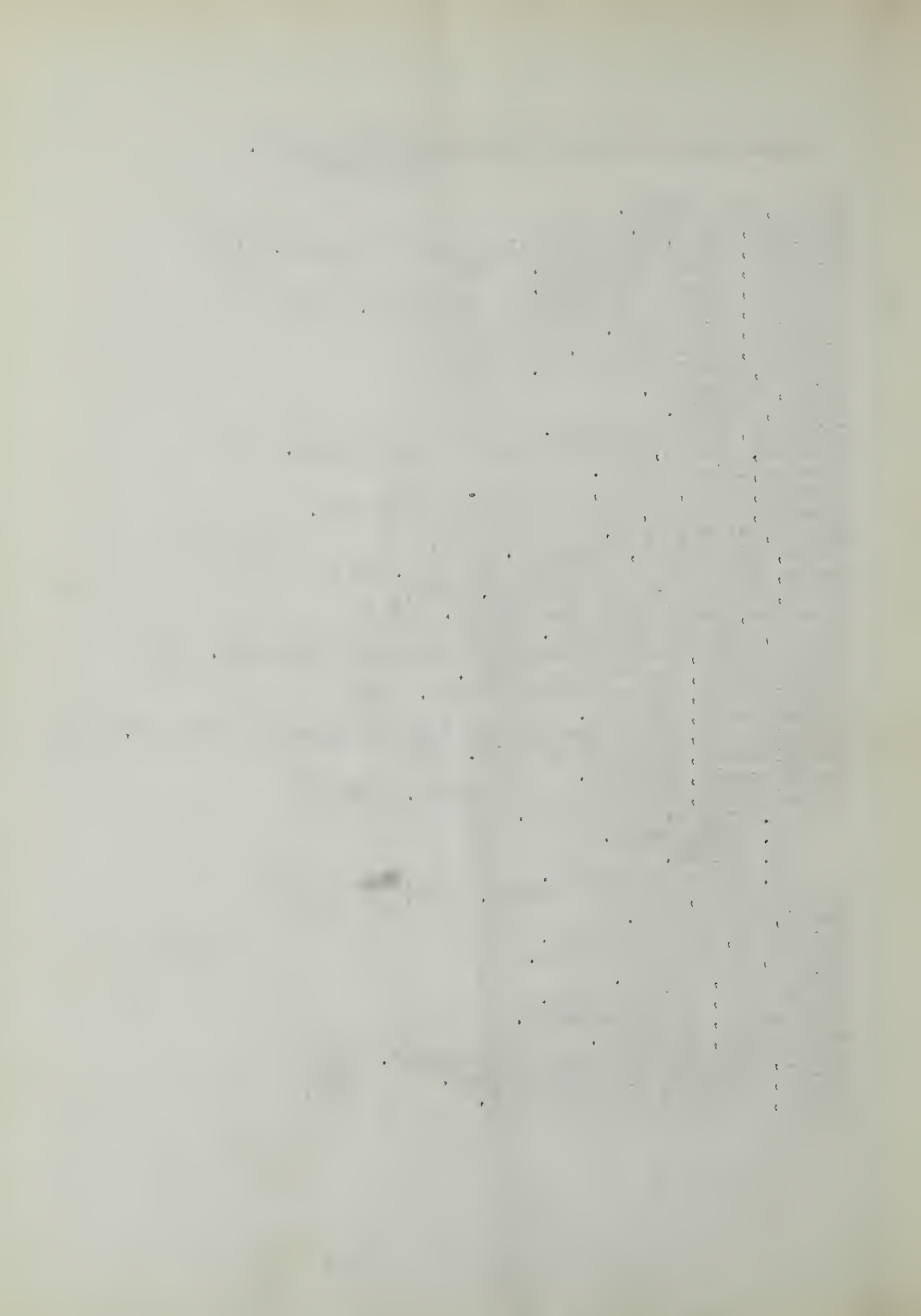
REPERTOIRE OF SECULAR CONCERT ORCHESTRA MUSIC.
(Continued.)

Guirard, Danse Persane. (Sc)
Handel, Minuet from "Berenice".
Haydn, Andante from the "Suprise Symphony". (Sc)
Haydn, First Movement from the "Military Symphony". (Sc)
Haydn, Symphony No. 2 in D (Salamon) (Sc)
Haydn, Symphony No. 12 in Bb. (Sc)
Herbert, Air de Ballet.
Herold, Overture to Zampa. (Sc)
Irish Melody, Londonderry Air. (Sc)
Katz, Elie Elie.
Keler Bela, Overture Lustspiel. (Sc)
Keler Bela, Son of the Pusztá.
Kreisler, Caprice Viennois.
Kreisler, Leibesfreud.
Kreisler, Leibeslied.
Labitsky, Herd Girl's Dream.
Liadov, The Music Box. (Sc)
Liszt, Dreams of Love.
Liszt, Second Hungarian Rhapsody. (Sc)
Luigini, Ballet-Egyptian. (Four Movements). (Sc)
Luigini, Ballet Russe. (Four Movements) (Sc)
Mac Dowell, Woodland Sketches.
 1. Will of the Wisp.
 2. In Autumn.
 3. From an Indian Lodge.
 4. From Uncle Remus.
 5. By a Meadow Brook.
Mendelssohn, Overture to "Athalia". (Sc)
Mendelssohn, Intermezzo from "Midsummer Night's Dream". (Sc)
Mendelssohn, Ruy Blas Overture. (Sc)
Mendelssohn, Spring Song.
Meyerbeer, Coronation March from "The Prophets". (Sc)
Mozart, Minuet and Trio from Eb Symphony. (Sc)
Mozart, Minuet and Trio from G Minor Symphony. (Sc)
Mozart, Overture to "Don Juan". (Sc)
Mozart, Overture to "Magic Flute". (Sc)
Mozart, Overture to "Marriage of Figaro". (Sc)
Nevin, Mighty Lak a Rose.
Nevin, The Rosary.
Nicolai, Festival Overture. (Introducing Eine Fest Burg)
Nicolai, Merry Wives of Windsor Overture. (Sc)
Offenbach, Minuet and Barcarole from "Tales of Hoffmann".
Pierne, March of the Little Lead Soldiers.
Puccini, Fantasie from "La Boheme". (Sc)
Puccini, Fantasie from "Madam Butterfly". (Sc)
Rimsky Korsakow, La Nuit de Noel. (Sc)
Rimsky Korsakow, Song of India.
Rimsky Korsakow, Third Movement of the Scheherazade Suite. (Sc)
Rossini, William Tell Overture. (Sc)
Rossini, Semiramide Overture. (Sc)
Saint Saens, French Military March. (Sc)
Saint Saens, Reverie du Soir. (Sc)



REPERTOIRE OF SECULAR CONCERT ORCHESTRA MUSIC.
(Concluded)

Salzer, Snow Queen.
Schubert, Am Meer.
Schubert, Entr'acte and Ballet from "Rosamunde". (Sc)
Schubert, March Militaire. (Sc)
Schubert, Moment Musicale.
Schubert, Unfinished Symphony (B Minor). (Sc)
Sibelius, Finlandia. (Sc)
Sibelius, Valse Triste. (Sc)
Sinding, Rustle of Spring. (Sc)
Smith, Columbine.
Speaks, Sylvia.
Schumann, Two Grenadiers.
Strauss, Johann, On the Beautiful Blue Danube. (Sc)
Strauss, Wiener Blut.
Strauss, Wine, Women, and Song. (Sc)
Strauss, Richard, Der Rosenkavalier Waltzes.
Sudesi, A Petit pas.
Suppe, Pique Dame, Overture. (Sc)
Suppe, Poet and the Peasant Overture. (Sc)
Suppe, Light Cavalry Overture. (Sc)
Svendsen, Swedish Military March. (Sc)
Thomas, Raymond Overture. (Sc)
Tschaikowsky, Andante Cantabile from Fifth Symphony. (Sc)
Tschaikowsky, Marcarolle (June).
Tschaikowsky, Chanson sans Paroles. (Sc)
Tschaikowsky, Melodie.
Tschaikowsky, First Movement of Sixth Symphony (with "cuts"). (Sc)
Tschaikowsky, Overture of 1812. (Sc)
Tschaikowsky, Romance.
Tschaikowsky, The Nut Cracker Suite. (Sc)
 1. Overture Miniature.
 2. Danse Arabe.
 3. Trepak.
 4. Valse Des Fleurs.
Tschaikowsky, Thornrose Waltz. (Sc)
Verdi, Aida March.
Collstedt, Jolly Fellows.
Wagner, Tannahauser March.
Waldteufel, Espana.
Waldteufel, Estudiantina.
Waldteufel, Je Taime Waltz.
Waldteufel, Myosotis.
Weber, Overture from "Der Freischutz". (Sc)
Weber, Overture from "Euryanthe". (Sc)
Weber, Overture from "Oberon". (Sc)



ANTHEMS.

ORCHESTRATION AVAILABLE.

Bach, J.S., Final Chorus from Saint Matthew Passion.
Bach, J.S., Now let every tongue adore thee.
Beethoven, L.van., The Heavens are declaring.
Bizet, G., Agnus Dei.
Brahms, Johann., Blessed (No. I "Requiem")
Brahms, Johann., How Lovely is thy dwelling place.
Franck, Caesar., Psalm 150.
Gounod, C., Jerusalem O turn thee unto the Lord.
Gounod, C., Lovely Appear.
Gounod, C., Praise ye the father.
Gounod, C., Sanctus.
Gounod, C., Unfold ye portals.
Gaul, No shadows yonder.
Gaul, Great and Marvellous.
Grieg, E., Invocation.
Handel, G.F., Amen Chorus from Judas Maccabeus.
Handel, G.F., And the Glory of the Lord.
Handel, G.F., For unto us a child is born.
Handel, G.F., Glory to God.
Handel, G.F., Hallelujah Chorus.
Handel, G.F., How excellent thy name.
Handel, G.F., Let their celestial concerts unite.
Handel, G.F., Lift up your heads.
Handel, G.F., Surely he hath borne our griefs.
Handel, G.F., Then round about the starry throne.
Handel, G.F., Worthy is the Lamb.
Haydn, Josef., Achieved is the Glorious work.
Haydn, Josef., The heavens are telling.
Haydn, Josef., The Lord is great.
Himmel, H.H., Incline thine ear.
Johnstone E., America's Message.
Martin, G.C., Hail gladdening Light.
Mendelssohn, F., But the Lord is mindful of his own.
Mendelssohn, F., Cast thy burden on the Lord.
Mendelssohn, F., Hear my prayer.
Mendelssohn, F., He watching over Israel.
Mendelssohn, F., How lovely are the messengers.
Mendelssohn, F., I waited for the Lord.
Mendelssohn, F., Thanks be to God.
Moore, H., O Saviour of the world. ("Darkest Hour")
Pergolesi, Glory to God in the highest.
Schubert, F., Great is thy glord, God. ("The Omnipotence")
Verdi, G., Hail to our native land.
Wagner, R., Hail bright abode. (Tannahauser March)
Wagner, R., Pilgrims Chorus.

ORATORIOS AND CANTATAS.

ORCHESTRATION AVAILABLE.

Gaul,, The Holy City.

Bach, John Sebastian., God's time is the best.

(Xmas.)

Bach, John Sebastian., Christmas Oratorio.

(Lent.)

Bach, John Sebastian., Saint Matthew Passion.

Brahms, Johann., German Requiem.

Dubois, Th., The Seven Last Words of Christ.

(Lent.)

Gade, N.W., Christmas Eve.

(Xmas.)

Gounod, Charles, Gallia.

Gounod, Charles, The Redemption.

Handel, George F., Judas Maccabeus.

Handel, George F., The Messiah.

(Xmas.)

Handel, George F., Samson.

Haydn, Josef., The Creation.

Mendelssohn, Felix., Elijah.

Mendelssohn, Felix., Hear my Prayer.

(Lent.)

Mendelssohn, Felix., Hymn of Praise.

Mendelssohn, Felix., Saint Paul.

Parker, Horatio., A D 1919.

(Patriotic)

Rossini G., Stabat Mater.

Saint Saens., Samson and Delilah.

Schutz, H., The Seven Last Words of Christ.

(Lent.)

1888

SAMPLE PROGRAM.

SECULAR ORCHESTRA CONCERT.

I

Overture to "Oberon". Weber.

II

Symphony No. 2 in D.. . . . Haydn.

I. Adagio: Allegro.

II Andante.

III Menuetto: Trio.

IV Allegro Spiritoso.

III

En Bateau from the "Petite Suite". Debussy.

Danse Persane. Guirard.

IV

Caprice Viennois. Kreisler.

Violin solo with Orchestra.

Valse Triste. Sibelius.

Reve Angelique. Rubenstein.

V

Wiener Blut. Strauss.

VI

Second Hungarian Rhapsody. Liszt.

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SAMPLE PROGRAM.
SECULAR ORCHESTRA CONCERT.

I

Magic Flute Overture. Mozart.
Orchestra.

II

String Quartet by Beethoven.

III

Suite "Ballet Egyptian".Luigini.
I. Allegro Non troppo.
II. Allegretto.
III. Andante Sostenuto.
IV. Allegro non troppo.
Orchestra.

IV

Vocal solos with orchestral accompaniment.

V

The Last Spring.Grieg.
Nocturne from "Midsummer Night's Dream". .Mendelssohn.
Finlandia.Sibelius.
Orchestra.

VI

Ave Maria.Schubert.
Violin solo with orchestra.

VII

March of the little tin soldiers. Pierne.
Minuet from "Berenice". Handel.
Prelude from "The Deluge". Saint Saens.
Orchestra.

VIII

Merry Wives of Windsor. Nicolai.
Orchestra.

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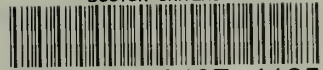
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